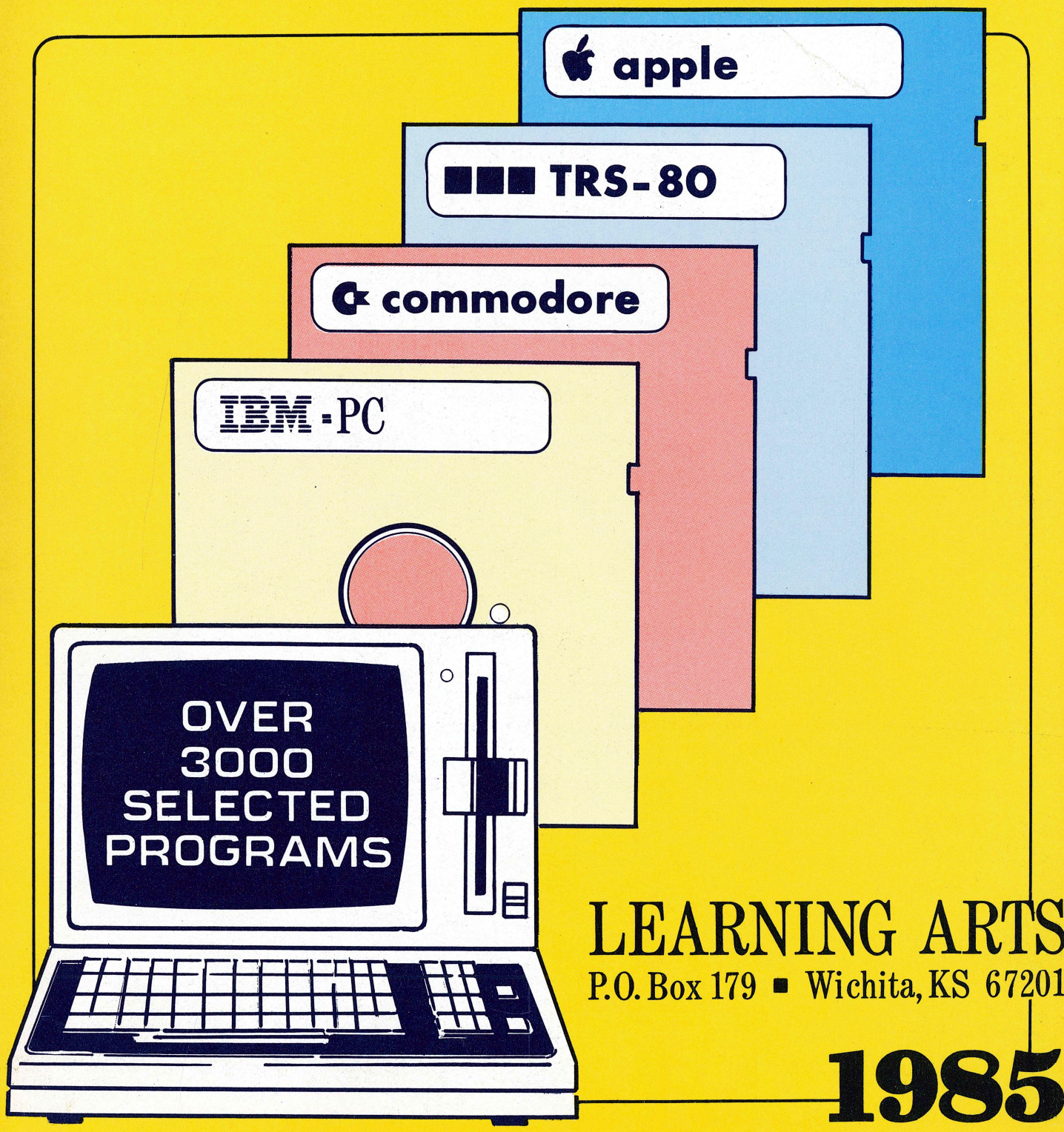
EDUCATIONAL COMPUTER SOFTWARE CATALOG



LEARNING ARTS
P.O. Box 179 ■ Wichita, KS 67201

1985

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P.O. Box 179
Wichita, Kansas 67201

Phone: 316/682-6594
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If you have not ordered from Learning Arts before, we invite you to give us the opportunity to serve you. We offer a large selection of high quality materials carefully chosen by our staff of educators, and backed by our experienced, knowledgeable service.

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Computer Coordinator, Wisconsin

"...The college is very pleased with all the programs we have received from your company, and we are very grateful for the prompt and courteous attention Learning Arts has given us at all times."
Secretary, Technical College, North Carolina

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Bookkeeper for School District, Missouri

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Learning Arts sells directly to schools and individuals. We have no dealers.

APPLE MICROCOMPUTER, General Information

Programs listed in this section are designed for Apple II machines such as the Apple II, Apple II+, Apple IIe and Apple IIc. The programs are available on diskette only. To run these programs, your computer must have Applesoft BASIC, a 3.3 Disk Operating System (DOS), and enough memory or "K" to equal or exceed the amount listed for the program. Nearly all programs listed will run on any of the Apple II machines, with exceptions noted. It is helpful, but not mandatory, for you specify which type of Apple II machine you have when placing your order.

See also Teacher/Administrator section.

ENGLISH

ALPHA TEACH

APPLE II DISKETTE [E][P]

1 Apple II Diskette, 48K.....$39.95

Beautiful color graphics help very young children and special needs students to learn the alphabet. Both upper and lower case letters are presented with objects that represent the letter; i.e. a dog is presented with the letter "d". Options include a continuous review of the alphabet, the reviewing of specific letters, or the matching of the letters to picture objects. Teacher's guide.

ALPHABET CIRCUS

APPLE II DISKETTE [E][P]

1 Apple II Diskette, 48K.....$29.95

Six lively, entertaining games with a circus theme help students learn the alphabet. Includes: Meet the Circus, Lost Letter, Alphabet Parade, Secret Letter, Juggler, Marquee Maker. User's guide.

ALPHABET SEQUENCE AND ALPHABETIZING

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$59.95

"...excellent program for both our regular and special education students." **Computing Teacher, Feb 1983.** *"...provides sound practice in alphabetizing at the basic level..."* **Curriculum Review, Aug-Sept 1982.**

Help students develop the skills of alphabet sequence and alphabetical order. Words alphabetized by the first, second, third, and fourth letters. A game follows each lesson. Sequential content moves from easy to more difficult. Immediate correction and feedback. Directions and sample exercises appear on-screen. Scoring at end of each lesson. Teacher's guide.

ALPHABET SONG/COUNT

APPLE II DISKETTE [E][P]

1 Apple II Diskette, 48K.....$29.95

"...excellent aid in learning the alphabet." **Computing Teacher, April 1983.**

Alphabet Song - students enjoy practicing the alphabet with this musical program. The child presses the keys and the letters appear in vivid color. Also great practice for learning the computer keyboard! **Count** - gives young children practice in counting, using colored shapes. Children will master numbers to 56. Teacher's guide.

ALPINE SKIER SERIES

APPLE II DISKETTE [I]

Complete Series (4 Sets; 4 Diskettes).....$113.75

"...example of excellent graphics used to enhance a drill and practice session..." **School Library Journal, Aug 1982.** *"Concise directions...good use of graphics."* **Software Reports, July 1983.**

Students become Olympic class skiers while improving reading comprehension skills. A phrase or sentence appears on the screen and the student selects the appropriate repose from choices on the screen. If the answer is correct, the skier proceeds down the slope. Anytime an incorrect answer is given, the skier "wipes out" (complete with snow-flying graphics) and the student loses that race. Each program provides basic instruction in specific comprehension skill needed to "race" and allows the teacher to quickly review the student's performance. Allows teachers to enter their own data (teaching activities). This procedure requires no programming ability and is accomplished by following prompts on the screen. Teacher's guide each set.

ALPINE SKIER: DETERMINING FACT AND OPINION
ALPINE SKIER: SEEING CAUSE AND EFFECT
ALPINE SKIER: CATEGORIZING WORDS & PHRASES
ALPINE SKIER: GETTING SENTENCE MEANINGS

(Each title, 1 Apple II Diskette, 48K.....$29.95)

ANALOGIES SERIES

APPLE II DISKETTE [I][J]

ANALOGIES TUTORIAL

2 Apple II Diskettes, 48K; Diagnostic Tests.....$49.95

Provides the student with a method of attack for solving analogies. Student learns to identify different types of analogies. Practice is provided in the identifiation and solution of analogies. Hints or explanations are provided to incorrect responses. Lesson content may be modified to provide a continuous challenge for the student. Complete record keeping individual student and class. Teacher's guide

ANALOGIES ADVANCED

2 Apple II Diskettes, 48K; Diagnostic Tests.....$39.95

Provides advanced work in analogies. Words have been selected from content area text at the 7-10 level. Not as difficult as the SAT prep material, but provides a real challenge for students who have completed Analogies Tutorial. Teacher's guide.

ANALYZING ADS

APPLE II DISKETTE [J][H][A]

1 Apple II Diskette, 48K.....$44.95

"Highly recommended and very useful." **Forecast for Home Economics.**

Students explore the dynamics and mechanics of advertising and learn how to better avoid exploitation when you show them how advertisements are created. You also equip them to examine their buying decisions. A simulation allows your students to create their own ads. Mature subject matter and proven instructional methods make your program perfect for adult basic education and ESL, too. Colorful graphic worksheets; teacher's guide.

ANTONYM ANTICS

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$39.95

Excellent graphics illustrate the study of antonyms. Program teaches and illustrates different pairs of opposites. Students then match dual pairs of opposites and are tested over their understanding of antonyms. Teacher's guide.

ARCADEMIC SKILL BUILDERS IN LANGUAGE ARTS

APPLE II DISKETTE [I][J][H]

"...quick, imaginative and as alluring as any video game..." **Electronic Learning, Oct 1983.** *"...comes with an impressive packet of documentation."* **Softalk, July 1983.**

Learning is easy when students are having fun. Each of these six *arcade type games* provides a bright, fun approach to learning with practice and drill in vital language arts areas. Each game has nine different speeds and four levels of reading and vocabulary difficulty. The games run from one to five minutes, are either paddle or keyboard controlled, and can be used with or without sound effects. For students of all ages needing practice in the language arts.

***Each $34.00 set includes 1 Apple II diskettes and a user's guide.**

****Each $44.00 set includes 1 Apple II diskette with instruction sheet; 21 Duplicating Masters for worksheets; 3 Progress sheets; and a 28-page teacher's guide which provides specific data base for each game and complete instructions for program implementation.**

VERB VIPER.....*$34.00/**$44.00
Subject/verb agreement at four levels.

WORDMAN.....*$34.00/**$44.00
Word-building through patterns.

WORD INVASION.....*$34.00/**$44.00
Recognition of six parts of speech.

SPELLING WIZ.....*$34.00/**$44.00
Frequently used and commonly misspelled words.

WORD RADAR.....*$34.00/**$44.00
Sight word recognition.

WORD MASTER.....*$34.00/**$44.00
Antonyms, synonyms, and homonyms.

ANTONYM GAME

APPLE II DISKETTE [H]

1 Apple II Diskette, 48K.....$29.50

"...entertaining way to learn or review vocabulary or even to study for a SAT exam...it is extremely easy to use and stands on its own." **Curriculum Review, Dec 1983.**

A high-res automobile racing game containing almost 750 antonym combinations. Improves the student's understanding of words and prepares for exams like the SAT. Permits the teacher to list and change words. High scores are saved until beaten. 3 difficulty levels.

BANK STREET STORYBOOK

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 64K.....$39.95

Allows children to draw pictures and write any text to create their own multi-paged stories. Twenty-one colors. Free-form placement of text and graphics. Stimulates interest and creativity in reading, writing and drawing. Requires joystick. User's guide.

BASIC READING SKILLS I SERIES

APPLE II DISKETTE [I]

Complete Series (5 Sets, 5 Diskettes).....$300.00

Reading is rewarding. Reading is for reasoning, researching, and relaxing. Reading can be all this, and more--but only if you know how. Animated graphics, informative stories and guided questions provide practice. For grades 5 and up. User-friendly. Comprehensive teacher's guide with documentation.

BASIC READING SKILLS I: INTRODUCTION

1 Apple II Diskette, 16K.....$60.00

This title is an introduction and must be viewed before using any of the Basic Skills Practice Programs. Contains the following programs:

- How to Recall Details
- How to Identify the Main Idea
- How to Draw Conclusions
- How to Put Things in Order
- Review of the Four Basic Skills

Any or all of the following Basic Skills Practice exercise the Four Basic Reading Skills above.

BASIC READING SKILLS I: PRACTICE A

1 Apple II Diskette, 16K.....$60.00

Contents: A Bicycle Trip; Fish for the Queen; Rent-A-Cow; Asparagus; People Bites.

BASIC READING SKILLS I: PRACTICE B

1 Apple II Diskette, 16K.....$60.00

Contents: Fisherman's Catch; Dieting; Toadstools; Prehistoric Life; Face of the Moon.

BASIC READING SKILLS I: PRACTICE C

1 Apple II Diskette, 16K.....$60.00

Contents: Tiny Nibbling Rabbits; Sleep Without Snoring; Pretty Fancy Fur; Insect Sense; Lost Ocean Liner.

BASIC READING SKILLS I: PRACTICE D

1 Apple II Diskette, 16K.....$60.00

Contents: Most Popular Pet; A Little Glitter; Old Globe; Longest Day; Right Things.

BIG DOOR DEAL SERIES

APPLE II DISKETTE [I]

Complete Series (4 Sets, 4 Diskettes).....$113.75

A takeoff on popular TV game show lets the student earn points toward "grand prizes" by using reading skills to open the right doors. Below the doors is a question or incomplete statement. On each door is a possible right answer. If the student chooses the door with the right answer, the door opens and he finds that he's earned one point toward the big grand prize, like a "pickled papaya". Each program provides basic instruction in the comprehension skill needed to play the game and allows the teacher to quickly see the results of the student's work. Teacher's guide with each set.

BIG DOOR DEAL: USING CONTEXT CLUES
BIG DOOR DEAL: RECOGNIZING FIGURATIVE LANGUAGE
BIG DOOR DEAL: MAKING ANALOGIES
BIG DOOR DEAL: SEQUENCING EVENTS

(Each title, 1 Apple II Diskette, 48K.....$29.95)

BUILDING COMPREHENSION SERIES

APPLE II DISKETTE P I

BUILDING COMPREHENSION I (Kittens, Kids, and a Frog)
2 Apple II Diskettes, 48K.....$39.95
Delightful stories and full color graphics provide first and second graders with carefully sequenced practice in the development of inferential and factual comprehension. The activities were designed by a classroom teacher using many of the favorite stories she and her students had experienced. Each story is followed by questions requiring the child to: identify details, sequence events, predict outcomes, identify main ideas, define vocabulary or draw conclusions. If a question is missed, the child is shown the parts of the story which contain the answer. The teacher may decide if the student can look back at the story as they answer the questions. Complete diagnostic record keeping. Teacher's guide.

BUILDING COMPREHENSION II (Chariots, Cougars, and Kings)
2 Apple II Diskettes, 48K.....$39.95
This second level comprehension skill builder uses stories that have been enjoyed by third through fifth grade children. The structure of the lessons are similar to those in Set 1. All stories and questions are modifiable. Hints are used to guide the student to the correct answer and a better understanding of the skill. Teacher's guide.

CAPITALIZATION AND PUNCTUATION

APPLE II DISKETTE J H

5 Apple II Diskettes, 48K.....$225.00
Designed for use as drill and practice with captialization and punctuation concepts at the secondary level. All disks feature a record keeping system, random selection of problems from large data bases, and brancing for review. Excellent teacher's manual with reproducible tests.

Capitalization Module - An in-depth study of the rules for capitatlization. Practice exercises include rules for capitalizing first words, and rules for capitalizing proper nouns and adjectives.

Punctuation Module 1 - Reviews the rules for using end marks, apostrophes, semicolons, colons, and hyphens. Separate exercise for practicing each of the concepts. (2 diskettes)

Punctuation Module 2 - Practice applying the rules for using commas. Drill and practice exercises. Includes a teaching review over fifteen rules for using commas.

Punctuation Module 3 - Drill and practice exercises and a teaching review of the rules for using quotation marks. Includes direct and indirect quotes, quotes within quotes, special use of words, and titles.

(Each title, 1 Apple II Diskette.....$62.50)

CAPITALIZATION PLUS

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K; Backup.....$44.95
"...an extensive treatment of the total skill of capitalization. Recommended for purchase without reservaation." **Media Review, March 1984.**
Covers all capitalization rules, generating thousands of problems. After a diagnostic test, the program branches to an appropriate level of difficulty. Each rule is carefully explained and illustrated. The student then applies the rule to specific problems. Error analysis and personal feedback are given after each problem as well as after each set of problems. A full diagnostic feature allows the teacher and the student to keep track of and pinpoint precise areas of difficulty. Data base management system. Teacher's guide.

CAPITALIZATION PRACTICE

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95
Provides highly interactive guided drill in capitalization and motivates students with an arcade-style reward game. Students may select from: capitalizing the first word in a sentence and the pronoun "I"; capitalizing proper personal names; the days of the week and the months; holidays and special days; and proper place names. A teacher-selected percentage of correct answers allows student to play a fun arcade-style game. Includes student management system. Teacher's guide.

CLASSES OF NOUNS

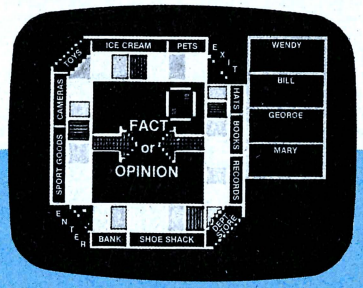
APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$60.00
"...recommended for use in the classroom...An excellent addition to a unit on nouns or parts of speech." **Creative Computing.**
Even the most grammar resistant child will become absorbed in these lessons which explain how nouns work. Makes the difference between proper and common nouns crystal clear. Explains when proper nouns are capitalized. Shows the difference between concrete and abstract nouns. Exercises let children identify the classes of nouns in sample sentences, and practice capitalization rules for proper nouns and titles. Teacher's guide.

COMMAS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95
Provides highly intereactive guided drill in the use of commas, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Includes: using commas in addresses; in dates; in series; in compound sentences; and to set off subordinate clauses. Students are presented with a run of sentences (the teacher determines the number) in which they must place commas in the correct positions. If they score a certain percentage, which may be adjusted by the teacher, they may choose to play an arcade-style game or work another lesson.



CAPITALIZATION: PRACTICE AND TEST

APPLE II DISKETTES P I

2 Apple II Diskettes, 48K.....$49.95
Best Software of the Year, 1982. **Learning Magazine and Curriculum Product Review.** *"The program rates an 'excellent' in all areas..."* **Educational Technology Magazine.**
The **Practice Disk** introduces the basic rules of capitalization. Each rule is followed by examples and a series of randomly presented practice sentences. The student works with each sentence until s/he believes it is correct. If there is an error, the corrected sentence is presented directly below the student's work. The student may compare the two sentences before proceeding. Practice will automatically terminate if they prove too easy for the student. Lessons include: First word in sentence and I; Proper personal names; Days of the week and months; Holidays, AM and PM; Proper place names; Titles; Miscellaneous including capitalization of mom, dad, etc. The second disk is the **Test Disk.** It has a ten-item mastery test for each of the lessons on the Practice Disk. Complete record keeping. **Teacher can modify and personalize lesson content.** Teacher's guide.

COMPREHENSION SKILLS GAMES SERIES

APPLE II DISKETTE P I

These games are not only fun for children, but they are easy and helpful for teachers to use. Each game concentrates on one important reading comprehension skill, providing lots of practice and exciting graphics. Cumulative record keeping and teacher utility is available on many games. They make good use of computer time by allowing 2-6 players (or teams) to use a program at one time. Games are available in **Primary Level** (Reading Level 2.0 - 3.5) or in **Intermediate Level** (Reading Level 3.5 - 5.0)

COMPREHENSION SKILL GAMES PRIMARY

12 Apple II Diskettes, 48K.....$587.40
Primary Level, Reading Level 2.0-3.5

FANTASY LAND PRIMARY
1 Apple II Diskette, 48K.....$49.95
Reading Between the Lines. Players venture through a fantasy land in quest of the sword of justice. As they travel they must "read between the lines" of fascinating stories, find the sword of justice, and attain the conquest of the Middle Realm. 1-6 players.

MAGIC CASTLE PRIMARY
1 Apple II Diskette, 48K.....$49.95
Vocabulary Building. Players become wise, old wizards trying to climb to the top of the enchanted castle and retrieve the magic wand. Ascending the castle depends on the wizards' wisdom in defining vocabulary words. Teacher utility allows educators to add vocabulary questions. 1-6 players.

GALAXY SPACE SEARCH PRIMARY
1 Apple II Diskette, 48K.....$49.95
"...imaginative...unique package." **Creative Computing, June 1984.**
Predicting Outcomes. Players search for remote alien groups. Each group has invented valuable new robot parts which the players must collect in order to build their robots and win the game. Answering predicting outcome questions is the only way to obtain the desired robot parts. 1-6 players.

AROUND-THE-WORLD PRIMARY
1 Apple II Diskette, 48K.....$49.95
Getting the Main Idea. Players take a fascinating trip around the world. As they pass each city, a graphic depicting a recognizable feature of that city is displayed. A player landing on designated spaces must read a selection and answer a "main idea" question before continuing onward. 2-6 players.

CHIEF-OF-DETECTIVES PRIMARY
1 Apple II Diskette, 48K.....$49.95
Drawing Conclusions. A Bingo-type format. Each player strives to be first to cover all letters in the phrase "Drawing Conclusions". By reading a short selection, players use their ability to analyze and draw conclusions to answer correctly. 2-5 players.

HIDDEN TREASURE PRIMARY
1 Apple II Diskette, 48K.....$49.95
"...fast moving and fun." **Courseware Report Card, 1983.**
Context Clues. Each player attempts to uncover a hidden treasure by winding in and out of paths leading to four different treasure sites. When landing on specially designated spots, the player must use context clues to define a word taken from a short reading selection. 2-6 players.

SMART SHOPPER PRIMARY
1 Apple II Diskette, 48K.....$49.95
"...delightful contemporary setting." **Creative Computing, Oct 1983.**
Fact or Opinion. This true-to-life game reflects real experiences in a shopping mall. When landing at the entrance to one of the stores, the player must determine whether a reading selection is fact or opinion. All questions are consumer related and deal with advertising claims. 2-6 players.

RACE TRACK PRIMARY
1 Apple II Diskette, 48K.....$49.95
Reading for Detail. Players compete to win the race in this fast-paced game. When landing on specially designated spaces, the player carefully reads a short selection in order to answer one of four questions--Who, What, When or Where. 2-6 players.

CLIMBING THE MOUNTAIN PRIMARY
1 Apple II Diskette, 48K.....$49.95
"...motivation through play and competetion." **Creative Computing, Oct 1983.**
Cause and Effect. Players follow winding paths leading to the top of the mountain. Players who land on designated spaces must answser questions concerning cause and effect relationships. Players also follow directions stated in terms of a cause and effect. For examples: CAUSE--you lost your way. EFFECT--go back 1 space. 2-6 players.

WHAT COMES FIRST PRIMARY
1 Apple II Diskette, 48K.....$49.95
Sequence. Using the computer keyboard, players arrange short reading selections by topic, and organize the groups of paragraphs in proper sequential order. Lots of peer play and four successively difficult matching categories make this game unbeatable for optimum computer use. 2 players.

SCHOOL DAYS PRIMARY
1 Apple II Diskette, 48K.....$49.95
Inference. Players work their way through the four levels of school in this engrossing program. As they proceed through grammar, junior high, high school and college, players make inferences related to specific reading selections based on student life. The first to graduate each of the four levels wins the game. 2-6 players.

BEHIND-THE-WHEEL PRIMARY
1 Apple II Diskette, 48K.....$49.95
Following Directions. This unique game offers new challenges every time it is used, Since a player's questions are determined by the route to be taken, each "trip" will be new and different. Landing on designated spaces, players answer questions about reading selections focused on giving or following directions. 2-6 players.

COMPREHENSION SKILLS GAMES INTERMEDIATE

12 Apple II Diskettes, 48K.....$587.40
Intermediate Level, Reading Level 3.5-5.0. The programs are the same as in the Primary Level, except the reading level is higher. See descriptions above for synopsis of each title.

FANTASY LAND INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

MAGIC CASTLE INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

GALAXY SPACE SEARCH INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

AROUND-THE-WORLD INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

CHIEF-OF-DETECTIVES INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

HIDDEN TREASURE INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

SMART SHOPPER INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

RACE TRACK INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

CLIMBING THE MOUNTAIN INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

WHAT COMES FIRST INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

SCHOOL DAYS INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

BEHIND-THE-WHEEL INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

BRANCHED INSTRUCTIONAL COURSEWARE

The following tutorial programs are outstanding learning materials. The instruction plan works like a private tutor - advancing, reviewing or restating instruction as needed. Students are given instruction and information, and are then tested over the materials. Their responses determine whether the students are branched forward to more advanced work, whether they are branched to a review and retesting (primary branching) or whether they are branched again to a more detailed explanation (secondary branching). Correct answers receive immediate reinforcement, while incorrect responses are branched to material specifically written to correct the error. Each student's needs are continually assessed and instruction is geared directly to those needs. Faster students need not be bored, while slower students receive the benefit of eternally patient computer-aided-instruction.

Diagnostic and Prescriptive tests aid in correct placement. Each program contains a monitor which records students' performances for teacher retrieval. Complete sets come with course outline and teacher's materials. Single lessons come with a course outline only.

Another special feature of these tutorial programs: It is one of the few series which offers a continuity of programming from elementary through college and adult eduction, *yet lessons may be purchased individually as well as in sets.* Programs are available in math and English (see Math Section). These programs can provide your school with individual learning material as well as a complete, continuous individualized learning program.

Preview diskettes are available for this courseware. Contact Learning Arts for more information.

IMPORTANT: All programs in the Branched Instructional Courseware section run on an Apple II Plus, an Apple IIe or an Apple II. Not all will work on the Apple IIc. Contact Learning Arts for more information.

READING COMPREHENSION

READING COMPREHENSION I

APPLE II DISKETTE *Grade Level 3-6*
Complete Series (4 Sets, 15 Diskettes).....$765.00
Designed to help students master basic reading skills. The programs offer remedial instruction in reading comprehension, following directions, and using reference sources. The four programs contain a total of 15 lesson; each lesson ends with a summary and test.

REFERENCE SKILLS
3 Apple II Diskettes.....$162.00
Discovering books* Book classes
Finding people, places and things*
(Each title, 1 Apple II Diskette.....$60.00)

FOLLOWING DIRECTIONS I
3 Apple II Diskettes.....$162.00
Reading words and letters carefully
Using directions to go places*
Doing things in order*
(Each title, 1 Apple II Diskette.....$60.00)
**Includes illustrated booklet*

READING INTERPRETATIONS: Read to Know
5 Apple II Diskettes.....$270.00
Read it all Order of events
Interpreting what you read (2 diskettes)
Understanding what you read
Remembering what you read
(Each title, 1 Apple II Diskette.....$60.00)
Except: Interpreting what you read
(Each title, 2 Apple II Diskettes.....$84.00)

READING INTERPRETATIONS: Read for Meaning
4 Apple II Diskettes.....$216.00
Adding up details Reading between the lines
Think as you read Learning about characters
(Each title, 1 Apple II Diskette.....$60.00)

READING COMPREHENSION II

APPLE II DISKETTE *Grade Level 4-7*
Complete Series (4 Sets, 16 Diskettes).....$612.00
To help in mastering basic reading skills. The programs offer remedial instruction in reading comprehension skills, following directions, and using reference sources. The four programs contain a total of 12 lessons. Included with the purchase of each program is a free test diskette.

REFERENCE SKILLS: The Library
3 Apple II Diskettes; 1 Free Test Diskette.....$162.00
Basic library skills Graph and map reading
Finding the book you want
(Each title, 1 Apple II Diskette.....$60.00)

FOLOWING DIRECTIONS II
3 Apple II Diskettes; 1 Free Test Diskette.....$162.00
Counting Roman numerals, dots and lines, compass points and walking directions
Words cut and doubled, scrambled letters and tongue twisters
Solving problems by following directions
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATIONS II, Set 1
3 Apple II Diskettes; 1 Free Test Diskette.....$162.00
Related sentences, identification of words and phrases, identification of paragraphs
Figures of speech, inferences and facts
Main idea, titles, turning point
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATIONS II, Set 2
3 Apple II Diskettes; 1 Free Test Diskette.....$162.00
Understanding paragraphs: related sentences, paragraphs
Understanding paragraphs: facts in different words indirect knowledge
Understanding paragraphs: facts and fancy, related ideas, and imagination exercise
(Each title, 1 Apple II Diskette.....$60.00)

READING COMPREHENSION III

APPLE II DISKETTE *Grade Level 7-10*
Complete Series (4 Sets, 16 Diskettes).....$785.40
Designed for help in mastering basic reading skills. The programs offer remedial instruction in reading comprehension, following directions, and using reference sources. The four programs contain a total of 16 lessons; each lesson ends with a test.

REFERENCE SKILLS: Dictionary
5 Apple II Diskettes.....$270.00
Information in the dictionary
Using the pronunciation guide
Homographs: homonyms; types of dictionaries
Using meanings and definitions
Derived and irregular forms
(Each title, 1 Apple II Diskette.....$60.00)

FOLLOWING DIRECTIONS III
4 Apple II Diskettes.....$216.00
Following oral and graphic instructions
Using symbols; automatic machines
Codes and arithmetic
Exercises in following directions
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATIONS III, Set 1
3 Apple II Diskettes.....$162.00
Paraphrasing; key words; inferences
Sentence-paragraph relations
Facts relating to paragraphs
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATIONS III, Set 2
4 Apple II Diskettes.....$162.00
Words and paraphrases
Main facts and key ideas in sentences and paragraphs
Inferences, purposes and conclusions, Parts 1 and 2
(Each title, 1 Apple II Diskette.....$60.00)
Except: Inferences, purposes and conclusions, Parts 1 & 2
(Each title, 2 Apple II Diskettes.....$84.00)

READING COMPREHENSION IV

APPLE II DISKETTE *Grade Level 8 and up*
Complete Series (4 Sets, 13 Diskettes).....$633.00
Designed to help in mastering basic reading skills. The program offers remedial instruction in reading comprehension, following directions, and using reference sources. This series contains a total of 13 lessons; each lesson ends with a summary and test.

REFERENCE SKILLS IV
4 Apple II Diskettes.....$216.00
Choosing a topic; use of references
Selecting appropriate information
Using the encyclopedia
Finding sources; card catalog; readers guide
(Each title, 1 Apple II Diskette.....$60.00)

FOLLOWING DIRECTIONS IV
2 Apple II Diskettes.....$108.00
Paraphrases; inference; point of view
Symbols; more practice with directions
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATIONS IV, Set 1
4 Apple II Diskettes.....$216.00
Interpreting paraphrase; inference; point of view
Paraphrase; source of references
Using internal and external evidence; opinion and fact
Assumption; elements of humor
(Each title, 1 Apple II Diskette.....$60.00)

READING INTERPRETATION IV, Set 2
2 Apple II Diskettes.....$108.00
Theme; style; metaphor, Part 1 and 2
Implication; attitude; symbolism; image; onomatapoeia
(Each title, 1 Apple II Diskette.....$60.00)
Except: Theme; tyle; metaphor, Part 1 and 2
(Each title, 2 Apple II Diskettes.....$84.00)

MECHANICS OF ENGLISH

MECHANICS OF ENGLISH I

APPLE II DISKETTE *Grade Level 4-9*
Complete Series (4 Sets, 18 Diskettes).....$918.00
Designed for students who require assistance to understand and apply the basic skills needed for correct sentence construction, capitalization, and punctuation. The four programs contain a total of 18 lessons; each lesson ends with a summary and test.

MECHANICS OF ENGLISH I: Sentence Patterns
4 Apple II Diskettes.....$216.00
Subject Verbs
Kinds of subjects Kinds of sentences
(Each title, 1 Apple II Diskette.....$60.00)

VERBS, MODIFIERS AND PRONOUNS
5 Apple II Diskettes.....$270.00
Subject-verb agreement Adverbs and Prepositions
Adjectives Pronouns
Regular/irregular verbs
(Each title, 1 Apple II Diskette.....$60.00)

CAPITALIZATION I
4 Apple II Diskettes.....$216.00
Rules of capitalization I, Part 1
Rules of capitalization I, Part 2
Capitalization of places and languages
Capitalization of Names and times
(Each title, 1 Apple II Diskette.....$60.00)

PUNCTUATION I
5 Apple II Diskettes.....$270.00
End punctuation Other uses of commas I
Use of commas Use of the Apostrophe I
Punctuation of abbreviations, quotations, and titles
(Each title, 1 Apple II Diskette.....$60.00)

MECHANICS OF ENGLISH II

APPLE II DISKETTE *Grade Level 6-9*
Complete Series (4 Sets, 23 Diskettes).....$1173.00
For students who require assistance to understand and apply the basic skills needed for correct sentence construction, capitalization, and punctuation. The four programs contain a total of 23 lessons; each lesson ends with a summary and test.

MECHANICS OF ENGLISH II: Sentence Patterns
5 Apple II Diskettes.....$270.00
Special verbs Adjectives and adverbs
Subjects, verbs and modifiers
Prepositions, nouns and objectives
Phrases in sentence patterns
(Each title, 1 Apple II Diskette.....$60.00)

VERBS, NUMBER AND CASE
7 Apple II Diskettes.....$378.00
Forming tenses of regular verbs
Irregular verbs Helper verbs; difficulty verbs
Passive and progressive verb construction; participles and gerunds
Number
Pronouns and case, Part 1
Pronouns and case, Part 2
(Each title, 1 Apple II Diskette.....$60.00)

CAPITALIZATION II
6 Apple II Diskettes.....$324.00
Rules of capitalization II, Part 1
Rules of capitalization II, Part 2
Capitalization of places and things, Part 1
Capitalization of places and things, Part 2
Capitalization of schools and times
Capitalization of historical documents and written words
(Each title, 1 Apple II Diskette.....$60.00)

PUNCTUATION II
5 Apple II Diskettes.....$270.00
End punctuation: punctuating quotations
Title punctuation and special quotation rules
Appositives and parenthetical expressions
Use of the apostrophe II Other uses of commas II
(Each title, 1 Apple II Diskette.....$60.00)

INTERMEDIATE READING SKILLS

APPLE II DISKETTE *Grade Level 4 and up*
Complete Series (3 Sets, 13 Diskettes).....$663.00
Provides practice and instruction in compound words, prefixes and suffixes, and use of inference. Color graphics reinforce instruction and review throughout the series. Helps the student focus on key concepts as well as measuring progress within the program. The three programs contain a total of 13 lessons; each lesson ends with a summary and test.

COMPOUND WORDS
3 Apple II Diskettes.....$162.00
Making compound words, Part 1
Making compound words, Part 2
Meanings of compound words
(Each title, 1 Apple II Diskette.....$60.00)

PREFIXES AND SUFFIXES
6 Apple II Diskettes.....$324.00
Prefixes, Part 1 Suffixes, Part 1
Prefixes, Part 2 Suffixes, Part 2
Prefixes, Part 3 Prefixes & suffixes: test
(Each title, 1 Apple II Diskette.....$60.00)

INFERENCES
4 Apple II Diskettes.....$216.00
Using what and where Using why
Using when and how Inferences: final test
(Each title, 1 Apple II Diskette.....$60.00)

SPELLING

SPELLING IMPROVEMENT I

APPLE II DISKETTE *Grade Level 7 and up*
Complete Series (3 Sets, 21 Diskettes).....$622.00
Provides independent study in the basic skills needed for good spelling. It aids both the student who desires individual instruction in the rules of spelling, and adults who wish to develop good communication skills. The three programs contain a total of 21 lessons; each lesson ends with a summary and test.

BASIC SPELLING RULES
7 Apple II Diskettes.....$216.00
Consonants and vowels; I-E rules; Adding suffixes to words ending in silent e; Adding suffixes beginning with a vowel; Adding suffixes to words ending in Y; Changing adjectives into adverbs; Hard and soft c.

FORMING PLURALS
6 Apple II Diskettes.....$194.40
Forming plurals of nouns ending in y, s, sh, ch, x, z, o, f, and fe. Irregular plural forms; identical plural forms; words borrowed from another language; plurals of compound words, titles, and symbols.

SPELLING DIFFICULT WORDS
8 Apple II Diskettes.....$248.40
Pronunciation as a key to good spelling; silent letters. Homonyms; similar-sounding words. Rules for hyphenating; words containing -ceed, -sede, -cede, and -ced; words containing double letters.

SPELLING IMPROVEMENT II

APPLE II DISKETTE *Grade Level 3-4*
Complete Series (4 Sets, 15 Diskettes).....$765.00
Uses a phonics approach to introduce vowels, consonants, and their combinations. The phonics instruction in these programs is intended to help students develop skills by using pronunciation as a guide to unknown spellings. The four programs in this series contain a total of 15 lessons; each lesson ends with a summary and test.

CONSONANT SOUNDS
5 Apple II Diskettes.....$270.00
Sound-alike consonants — Consonant digraphs
Unique consonant sounds — Consonant blends
Final consonant digraphs
(Each title, 1 Apple II Diskette.....$60.00)

VOWEL SOUNDS
3 Apple II Diskettes.....$162.00
Short vowel sounds
Long vowel sounds
Vowel blends and diphthongs
(Each title, 1 Apple II Diskette.....$60.00)

SPECIAL KINDS OF WORDS
4 Apple II Diskettes.....$216.00
Plurals
Compounds
Contractions and silent letters
Homonyms
(Each title, 1 Apple II Diskette.....$60.00)

DAYS, MONTHS, AND HOLIDAYS
3 Apple II Diskettes.....$162.00
Days of the week — Special holidays
Months of the year
(Each title, 1 Apple II Diskette.....$60.00)

CAREER ENGLISH

IMPROVING YOUR PUNCTUATION

APPLE II DISKETTE *Grade Level 9 and up*
Complete Series (3 Sets, 17 Diskettes).....$867.00
Explains the chief function of each type of punctuation and relates each to use in written communication. The student gains knowledge of the rules of proper punctuation, and learns to apply them in order to create meaningful written expression. The three programs contain 17 lessons; each lesson ends with a summary and test.

TERMINAL PUNCTUATION
4 Apple II Diskettes.....$216.00
Punctuating the four kinds of sentences
Clauses, phrases and sentence fragments
Other uses of punctuation
Summary and test: terminal punctuation
(Each title, 1 Apple II Diskette.....$60.00)

INTERNAL PUNCTUATION
7 Apple II Diskettes.....$378.00
Commas and independent clauses
Commas in series, phrases and clauses
Punctuation of addresses, dates and nonrestrictive elements
Summary and test: internal punctuation
Using the semi-colon
Using the colon
Using the dash
(Each title, 1 Apple II Diskette.....$60.00)

MECHANICS OF PUNCTUATION
6 Apple II Diskettes.....$324.00
Use and punctuation of quotations
Handling quotations other than direct discourse or exact thought
Use of parentheses and brackets
Using underlining and italics
Using the apostrophe
Using the hyphen
(Each title, 1 Apple II Diskette.....$60.00)

IMPROVING YOUR WRITING

APPLE II DISKETTE *Grade Level 9 and up*
Complete Series (3 Sets, 17 Diskettes).....$805.00
Designed to build confidence and competency in using written English. This series deals with writing grammatically acceptable sentence in addition to discussing stylistic matters such as sentence variety and conciseness of thought. Provides the student with opportunities to work with grammatical errors of agreement, modifiers, and shifts in person, mood, tense, and voice. The three programs contain 17 lessons; each lesson ends with a summary and test.

IMPROVING YOUR GRAMMAR
6 Apple II Diskettes.....$324.00
Subject-verb agreement: compound subjects
Subject-verb agreement in special cases
Pronoun reference; unclear references
Pronoun reference; agreement; impersonal pronouns
Dangling verbal phrases
Misplaced phrases; passive voice
(Each title, 1 Apple II Diskette.....$60.00)

IMPROVING SENTENCE STRUCTURE
5 Apple II Diskettes.....$270.00
Parallel structure
Shifts in person and subject
Shifts in tense
Shifts in mood
Shifts in voice
(Each title, 1 Apple II Diskette.....$60.00)

IMPROVING YOUR STYLE
6 Apple II Diskettes.....$216.00
Techniques of subordination of ideas, Part 1-2
Simple, complex and compound sentences, Part 1-2
Variety in word order and sentence length
Conciseness in writing
(Each title, 1 Apple II Diskette.....$60.00)
Except: Techniques of subordination of ideas, Part 1-2
Simple, complex and compound sentences, Part 1-2
(Each title, 2 Apple II Diskettes.....$60.00)

SENTENCES, NOUNS AND PRONOUNS

APPLE II DISKETTE *Grade Level 9 and up*
Complete Series (2 Sets, 6 Diskettes).....$306.00
Helps the student speak and write better by presenting the structure and usage of sentences, nouns, and pronouns in clear understandable language. The two programs contain 6 lessons; each lesson ends with a summary and test.

SENTENCE AND NOUNS
2 Apple II Diskettes.....$108.00
Sentence — Nouns
(Each title, 1 Apple II Diskette.....$60.00)

PRONOUNS SERIES
4 Apple II Diskettes.....$216.00
Pronouns 1 (Kinds)
Pronouns 2 (Agreement; indefinite)
Pronouns 3 (Personal)
Pronouns 4 (Self; relative agreement)
(Each title, 1 Apple II Diskette.....$60.00)

VERB USAGE

APPLE II DISKETTE *Grade Level 9 and up*
Complete Series (4 Sets, 18 Diskettes).....$918.00
Discusses tense, voice, principal parts, and verb-subject agreement. The student is provided drill in grammar and usage. The four programs contain 18 lessons; each program includes a summary and test.

KINDS OF VERBS
4 Apple II Diskettes.....$216.00
Action verbs and helping verbs
Tenses of verbs
Active and passive voice
Linking verbs
(Each title, 1 Apple II Diskette.....$60.00)

USING VERBS I
6 Apple II Diskettes.....$324.00
Simple subjects
Verb-subject agreement
Verb-subject agreement in turned around sentences
Sentences beginning with "there"
Special kinds of verb-subject agreement
More on verb-subject agreement
(Each title, 1 Apple II Diskette.....$60.00)

USING VERBS II
5 Apple II Diskettes.....$270.00
Using principle parts 1
Using principle parts 2
Lie and lay
Sit and set
Rise and raise
(Each title, 1 Apple II Diskette.....$60.00)

PERFECT TENSES
3 Apple II Diskettes.....$162.00
Present perfect tense
Perfect tense, past
Future perfect tense
(Each title, 1 Apple II Diskette.....$60.00)

MODIFIERS

APPLE II DISKETTE *Grade Level 9 and up*
Complete Series (3 Sets, 10 Diskettes).....$510.00
Discusses modifiers -- one of the most difficult areas in English grammar. This material is presented in simple, practical steps that take the confusion out of the subject. The three programs in this series contain a total of 10 lessons; each program includes a summary and test.

KINDS OF MODIFIERS
3 Apple II Diskettes.....$162.00
Descriptive and limiting adjectives
Adjectives which follow their nouns
Adverbs
(Each title, 1 Apple II Diskette.....$60.00)

USING MODIFIERS I
4 Apple II Diskettes.....$216.00
Correct use of adjectives and adverbs
Linking verbs and predicate adjectives
Correct use of good and well
Using Modifiers I, general review
(Each title, 1 Apple II Diskette.....$60.00)

USING MODIFIERS II
3 Apple II Diskettes.....$162.00
Correct use of them, those and where
Degrees of comparison
Placement of modifiers
(Each title, 1 Apple II Diskette.....$60.00)

CONNECTIVES AND INTERJECTIONS

APPLE II DISKETTES *Grade Level 9 and up*
Complete Series (3 Sets, 10 Diskettes).....$510.00
This series helps the student learn to use connectives to express exact relationships between sentences and ideas. Coordinate ideas are made clear by the proper use of connectives and interjections. The three programs in this series contain a total of 10 lessons; each program includes a summary and test.

INTRODUCTION TO CONNECTIVES AND INTERJECTIONS
3 Apple II Diskettes.....$162.00
Conjunctions — Interjections
Prepositions
(Each title, 1 Apple II Diskette.....$60.00)

USING CONNECTIVES
4 Apple II Diskettes.....$216.00
Like and as
Different from and differently than
Pronouns as objects
Who and whom
(Each title, 1 Apple II Diskette.....$60.00)

SUBJECT, PREDICATES AND INTERJECTIONS
3 Apple II Diskettes.....$162.00
Subjects and predicates
Compound subjects and predicates 1
Compound subjects and predicates 2
(Each title, 1 Apple II Diskette.....$60.00)

SENTENCE COMPLETERS AND PHRASES

APPLE II DISKETTES *Grade Level 9 and up*
Complete Series (2 Sets, 10 Diskettes).....$510.00
Teaches students to identify and use the various sentence completers such as objects, predicate nouns, and predicate adjectives. Students also learn about the importance in application of phrases in developing well-constructed sentences. The two programs in this series contain a total of 8 lessons; each program includes a summary and test.

SENTENCE COMPLETERS
5 Apple II Diskettes.....$270.00
Direct objects — Object complements
Indirect — Appositives
Predicate adjectives and predicate nouns
(Each title, 1 Apple II Diskette.....$60.00)

PHRASES
5 Apple II Diskettes.....$270.00
Prepositional phrases — Particles
Infinitives — Gerunds
Appositive phrases
(Each title, 1 Apple II Diskette.....$60.00)

SENTENCE TYPES AND FRAGMENTS

APPLE II DISKETTES *Grade Level 9 and up*
Complete Series (2 Sets, 7 Diskettes).....$357.00
Introduces students to various clauses and sentences which are necessary for good writing skills. The two programs in this series contain a total of 7 lessons; each program includes a summary and test.

SENTENCE TYPES
4 Apple II Diskettes.....$216.00
Adverb and adjective clauses
Noun clauses
Simple, compound, complex and compound-complex sentences
Declarative, interrogative, imperative, exclamatory sentences
(Each title, 1 Apple II Diskette.....$60.00)

SENTENCE FRAGMENTS AND RUN-ON SENTENCES
3 Apple II Diskettes.....$162.00
Sentence fragments
Recognizing run-on sentences
Correcting run-on sentences
(Each title, 1 Apple II Diskette.....$60.00)

COMPU-READ

APPLE II DISKETTE I J H A

1 Apple II Diskette, 48K.....$29.95

"A fine resource for teachers seeking a way to individualize skill building while motivating students..." **Booklist, Jan 1, 1983.** *"...well developed and seems designed to build up reading skill in discrete segments."* **Creative Computing, Sept 1980.**

A powerful tool for improving reading speed and recall. Works with the reader, adjusting itself to the individual's skills and giving detailed feedback on progress and reading rates. A sequence of increasingly complex skills, from simple words character recognition to identification of rapidly presented words is presented in the first two programs. In the third program, vocabulary practice is provided using synonyms and antonyms as a tool. Finally, user response to high speed sentence presentation builds skills in speed and comprehension.

COMPUTER GOOSE SERIES

APPLE II DISKETTE P

Complete Series (6 Sets; 6 Diskettes).....$150.00

Designed to teach reading and word recognition. Text is a blend of Mother Goose Rhymes and original new material to modernize, add a twist for interest and teach particular values to the student. Extensive graphics maintain high interest. Includes management system. Teacher's guide.

COMPUTER GOOSE 1
1 Apple II Diskette, 48K.....$29.95
Teaches safety via Jack and Jill and Humpty Dumpty

COMPUTER GOOSE 2
1 Apple II Diskette, 48K.....$29.95
Teaches colors/spelling. Little Boy Blue and Friends help out.

COMPUTER GOOSE 3
1 Apple II Diskette, 48K.....$29.95
Teaches how to tell time. Includes Hickory Dickory Dock and Ten O'clock Scholar.

COMPUTER GOOSE 4
1 Apple II Diskette, 48K.....$29.95
Teaches neatness and dress. Old Woman in the Shoe and her friends assist.

COMPUTER GOOSE 5
1 Apple II Diskette, 48K.....$29.95
Teaches animals and objects with help from Mother Hubbard and the Piper's Son.

COMPUTER GOOSE 6
1 Apple II Diskette, 48K.....$29.95
Teaches numbers. Sing a Song of Sixpence.

COMPUTER DICTIONARY SERIES

(A Spelling and Vocabulary System)

APPLE II DISKETTE P I J H

This easy-to-use, versatile program provides a fun way to learn the meaning and spelling of new words. Easily adaptable to any anthology or subject matter. Teacher's guide.

COMPUTER DICTIONARY
2 Apple II Diskettes, 48K; Backup.....$49.00
Student Disk: Students are presented with either definitions or incomplete sentences and must guess the mystery word. **Teacher Disk:** Enables teachers to create an unlimited number of new word lists and definitions. Can be tailored to any difficulty level or subject area.

COMPUTER DICTIONARY: WORD LIST Grades 4-9
5 Apple II Diskettes, 48K.....$59.00
A series of ready-to-use word disks. Each disk, containing over 300 words and definitions, has been carefully prepared to coincide with elementary and middle school reading curriculum. Lists include prefixes, rootwords, contractions as well as special categories such as library terms, literary terms and words from famous people and places.

CONSONANT COMBO

APPLE II DISKETTE E P

3 Apple II Diskettes, 48K; Poster, Stickers.....$69.95
Three disk set containing educational games designed to reinforce beginning consonant sounds (**Consonant Carnival**), blends (**Pirate's Treasure**), and digraphs (**Gone Fishing**). Also contains five posters, and stickers to simplify the keyboard.

CONSONANT-VOWEL-CONSONANT

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Backup.....$29.95
Uses stairstep graphics and immediate reinforcement to help children learn the consonant-vowel-consonant patterns that make real words. A vowel and consonant are given. Each time the student adds a consonant that makes a proper word, he gets rewarded by a happy face and gets to take a higher step on the stairs. After 7 steps, a huge, happy, "winking" face fills the screen and the student may then continue with a new set of steps displaying a different vowel-consonant ending.

CREATING COMPOUND AND COMPLEX SENTENCES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Worksheets.....$49.95
Program includes readiness skills, combining simple sentences into compound sentences and compound/complex sentences, adverb clauses, and adjective clauses. Teacher's guide. *Note: Will not work on the Apple IIc.*

CONTENT AREA READING SERIES

APPLE II DISKETTE I

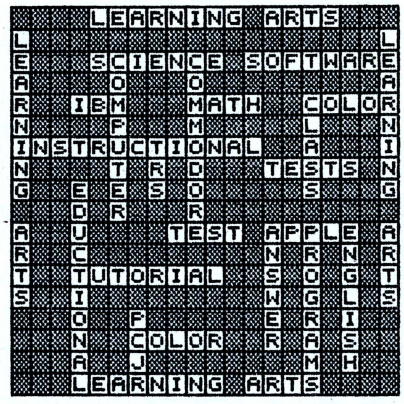
Provides practice in reading articles from content areas. Motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Each disk provides tutorial information explaining how different reading skills can be used to effectively comprehend particular content area materials. Articles are written at a 5-6 grade reading level while the interest level is appropriate for students through the high school level. Students choose one of the five articles to read and then, after reading it, answer questions pertaining to the article. Questions are divided into six categories of comprehension skills: main idea, vocabulary, details, fact or opinion, sequence, and inference. At the end of each run of questions students who score a certain percentage (which may be adjusted by the teacher) may play a challenging arcade-style game or choose to read another article. Student management system holds up to 200 student files. Teacher's guide with each title.

CONTENT AREA READING: LITERATURE
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: MATH
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: SCIENCE
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: SOCIAL STUDIES
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95



CROSSWORD MAGIC

APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K.....$49.95

"Highly motivating vocabulary practice routine; easy to use. Great program...recommend it highly." **Courseware Reviews, 1982.** *Recommended.* **Booklist, Sept 1, 1982.**

Let the computer help you create crossword puzzles for your own vocabulary lists, spelling tests and other teaching needs. Type in the words you need. The computer arranges them in puzzle form. Puzzle size ranges from 3 × 3 boxes to 20 × 20 boxes. Printers using the program must have graphic capabilities.

CUSTOMIZED ALPHABET DRILL

APPLE II DISKETTE P

1 Apple II Diskette, 48K.....$59.95
Gives every student individualized practice in learning the alphabet. Four levels of difficulty: (1) filling in letters missing in an alphabetical sequence; (2) filling in a letter between two letters; (3) filling in a letter before a given letter; (4) filling in the letters before and after a given letter. Variable levels of difficulty. Immediate correction and feedback. Teacher's guide.

CUSTOMIZED "FLASH" SPELLING

APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K.....$59.95

"...a good drill-and-practice program of educational value for those students who need extra motivation to do the repetitive practice required to learn new vocabulary." **Educational Technology, June 1982.**

Provides a highly motivating format for practicing spelling words. Contains a list of frequently used words. Teachers enter any list of words that fits their curriculum. Example: a weekly spelling test. Immediate correction and feedback. Increased speed and difficulty levels are automatically adjusted in response to the student's accuracy. Scoring appears on-screen at the end of each lesson. Teacher's guide.

DIAGRAMMING SERIES

APPLE II DISKETTE J H

5 Apple II Diskettes, 48K.....$145.00
A very well done tutorial and practice set. Learning-assisted programs provide full explanations and lead students through the diagramming process. All incorrect responses are followed by helpful explanations. Allows students to work independently. Begins with simple sentences, subject and verb, and progresses to more complex sentences. Large, easy-to-read diagramming grids make it easier for students to understand the parts of a sentence and how those parts are related. A proven and effective way to reduce grammatical errors in writing. Teacher's notes.

Diagramming I - simple sentences with modifiers

Diagramming II - simple sentences with modifiers, compound subjects and compound verbs, single subjects and compound verbs, compound subjects with single verbs and diagramming infinitives.

Diagramming III - compound sentences with modifiers

Diagramming IV - complex sentences with modifiers

Diagramming V - compound complex sentences with modifiers

(Each title, 1 Apple II Diskette.....$29.95)

DICTIONARY SKILLS SERIES

(Word Mover)

APPLE II DISKETTE P I

Complete Series (4 Sets; 4 Diskettes).....$139.80
This graded series of lessons provides practice on the skills of alphabetizing and using dictionary guide words. Alphabetizing begins with the first letter in early lessons to the fifth letter in later levels. The second program asks students to tell if a word comes before the page shown, after it, or is on the page by using given guide words. Excellent practice for locating words in reference books. Teacher's guide with each set.

DICTIONARY SKILLS, Grade 3
1 Apple II Diskette, 48K.....$34.95

DICTIONARY SKILLS, Grade 4
1 Apple II Diskette, 48K.....$34.95

DICTIONARY SKILLS, Grade 5
1 Apple II Diskette, 48K.....$34.95

DICTIONARY SKILLS, Grade 5
1 Apple II Diskette, 48K.....$34.95

DOLCH LIST: THE MONTANA READING PROGRAM

APPLE II DISKETTE E P

1 Apple II Diskette, 48K; Flash Cards.....$29.95
Designed to help beginning readers learn the words that comprise the Dolch list, one of the most widely recognized and respected list of words all children must know. Contains flash cards and suggested games. Teacher's guide.

DRAGON'S KEEP

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$29.95

"The game is fun; exciting things happen...both entertains and educates in a first class manner...there is no killing, no zapping, no squishing and no injury in the entire game..." **Softalk, Feb 1983.**

A captivating adventure into dragon territory that develops reading comprehension. Any child who can read at the second grade level can play the game without help.

EASY AS ABC

APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$39.95
Five games that introduce the alphabet in a variety of fun and engaging ways. Children learn letter recognition, alphabetical sequence and upper and lower case. A Picture Menu makes it easy for children to select from Match Letters, Dot to Dot, Leapfrog, Lunar Letters or Honey Hunt. A diskful of colorful animated graphics such as jumping frogs and buzzing bees keep children fascinated. User's guide.

ENGLISH GRAMMAR DRILLS

APPLE II DISKETTE H C

4 Apple II Diskettes, 48K; Backups.....$240.00
Designed by a college professor to bring entering college level students up to grade level in English basics. Also useful for teaching and review for high school students. Students can now gain practice in the areas of grammar that often cause problems. They can pinpoint their weaknesses and improve their skills. Exercises are broken down into approximately 10 minute lengths and use varying formats to hold interest. Drills include: agreement, apostrophes, appositives, clauses, colons, commas, fragments, intrusions, its and it's, lay - lie, noun clauses, restrictions, semicolons, splices. Extensive teacher's material.

ENGLISH ACHIEVEMENT SERIES

APPLE II DISKETTE ■■■■■H■■

5 Apple II Diskettes, 48K; Backups.....$175.00

"...the English Achievement series is a comprehensive package that should prove an excellent tool for both group instruction and individual student review." **Electronic Learning.** *"Just the series of programs I have been looking for to use with my honors English and college bound juniors."* **Minn. State Dept. of Education High Quality Courseware List.**

Designed as a grammar practice for the College Entrance Examination Board's English Composition Exam, this distinguished series of programs is also an excellent English grammar tutorial and review for high school students. Sentences containing errors are presented in batches of sixteen. When the student gives an answer, s/he is told whether the answer is correct or incorrect. In either case, the error involved and a correct rewrite with an explanation is given. The part of the sentence which is incorrect is highlighted. The student is given encouraging remarks that indicate progress. If s/he misses one type of error more than twice, this is shown. After each batch of sixteen sentences, an analysis is given to indicate kinds of errors being made and approximate Achievement score. The student may choose to continue with another batch of sentences, and the analysis is up-dated. Since each program in the series presents a different format which appears on the CEEB's English Achievement Examination, we recommend purchase of the complete series for successful College Board preparation. Teacher's guide with each set.

English Achievement I
English Achievement II
English Achievement III
English Achievement IV
English Achievement V

(Each title, 1 Apple II Diskette, 48K; Backup....$39.95)

ENGLISH CHALLENGE

APPLE II DISKETTE ■■■■■H■■

1 Apple II Diskette, 48K.....$39.00

A quiz contest with grammar, vocabulary, spelling, and literature as content. Up to four can play at one time in hot competition, or one person can play against the computer. Over 500 questions based on goals and objectives of high school English departments. Teacher's guide.

ENGLISH USAGE

APPLE II DISKETTE ■■■■JH■■

Complete Series (5 Sets, 5 Diskettes).....$275.00

Many students need to improve their everyday English usage. This series is an excellent in-depth study and review of practical everyday grammar. The emphasis throughout the series is on practical usage. The concepts for study in this series are readily applied to student's writing, an area receiving a great deal of attention in today's secondary classrooms. Due to its focus on usage, this series is also **suitable for use in teaching English as a second language at the secondary level.** Accompanying each set is a teacher's manual that includes educational objectives, operating instructions, an overview of the exercises, suggestions for use, listings of all problems, and a reproducible test.

COMPARISONS WITH ADJECTIVES

1 Apple II Diskette, 48K.....$62.50

Provides in-depth practice in using the comparative and superlative forms of adjectives. Consists of four exercises on comparisons, one exercise on figurative language, a teaching review exercise, and a system for keeping record of each student's performance. Throughout the set a random selection of problems allows for multiple, non-repetitive practices. Varied exercise formats maintain a high level of interest.

PERSONAL PRONOUNS

1 Apple II Diskette, 48K.....$62.50

Provides practice in using the various forms of personal pronouns. The set consists of three exercises on the subjective, objective, and possessive forms of pronouns, one exercise on pronouns and antecedents, a teaching review of the forms of personal pronouns, and a teaching review of pronouns and antecedents.

PLURALS AND POSSESSIVES

1 Apple II Diskette, 48K.....$62.50

Gives students practice with forming the plurals and possessives of nouns. The set consists of an exercise on forming plurals of nouns, an exercise on forming possessives of nouns, an exercise which combines the concepts of plurals and possessives of nouns, and a teaching review exercise. Varied exercise formats and random selection of problems are featured throughout the set.

PASSIVE VOICE

1 Apple II Diskette, 48K.....$62.50

Provides practice in using the passive voice. The set consists of a screening exercise, three practice exercises with varied formats, and a teaching review exercise. Every exercise features a random selection of problems, allowing for multiple, non-repetitive practices.

SUBJECT/VERB AGREEMENT PRACTICE

1 Apple II Diskette, 48K.....$62.50

Gives the student practice in solving problems with subject/verb agreement. The set consists of an exercise on intervening prepositional phrases, an exercise on indefinite pronouns, an exercise on compound subjects, an exercise on singular form/plural meaning and plural form/singular meaning, and a teaching review exercise. Random selection of problems and varied formats are featured throughout the module.

ENGLISH: PARTS OF SPEECH

APPLE II DISKETTE ■■■■■H■A

1 Apple II Diskette, 48K; Backup.....$49.00

A no-nonsense, individualized approach to aid you in helping your students diagnose their proficiency in the traditional parts of speech. If remediation is needed, 154 sentences, divided into sections of verbs, adverbs, pronouns, adjectives, prepositions, and conjunctions, provide variety for extended instruction. Analyze progress using a printer to make a paper copy for pretesting, and then post-testing your students after they work at the computer. 88-page Support Manual.

ENGLISH QUIZ SERIES

APPLE II DISKETTE ■■■■JH■■

Complete Series (4 Sets, 4 Diskettes).....$84.00

Each disk contains 400 questions and answers, arranged by topic, in multiple choice, true/false, fill-in, and short answer format. Two games included on each disk. Immediate feedback, opportunity to review. User's guide.

ENGLISH QUIZ 1

1 Apple II Diskette, 32K.....$27.00

Prefixes, Suffixes, Roots and Stems, Plurals, Syllabication, Etymology, Language History.

ENGLISH QUIZ 2

1 Apple II Diskette, 32K.....$27.00

Parts of Speech, Nouns, Adjectives, Pronouns, Verbs, Adverbs, Prepositions, Conjunctions, Classes of Sentences, Sentence Grammar.

SPELLING QUIZ

1 Apple II Diskette, 32K.....$27.00

VOCABULARY QUIZ

1 Apple II Diskette, 32K.....$27.00

EXTRA! EXTRA!

APPLE II DISKETTE ■■■IJ■■■

1 Apple II Diskette, 48K.....$39.95

Children see how fast they can read. After choosing the speed, students read the clues, track down the facts (who, what, where, when, why, or how) and submit their story to go to press! Three levels of play: Cub, Staff, or Ace Reporter. Teacher's guide.

FACT AND OPINION

APPLE II DISKETTE ■■■I■■■■

1 Apple II Diskette, 48K.....$39.95

Multi-level program gives the student extensive practice in learning to discriminate whether information is fact or opinion. Student learns specific key words to look for and "test" questions to ask. Lessons begin at the third grade level and the vocabulary gradually increases in difficulty. In each lesson, a statement is given to the student. Student must decide if the statement is fact or opinion. If the student misses the question, the statement remains on the screen and an explanation is given. In the explanation, key word or ideas are emphasized. All lessons and explanations may be modified by the teacher. Record keeping. Teacher's guide.

FIGURATIVE LANGUAGE

APPLE II DISKETTE ■■■■J■■■

2 Apple II Diskettes, 48K.....$49.95

Helps student develop a fuller understanding and appreciation of the figures of speech. The student learns to identify examples of simile, metaphor, hyperbole, and personification. Program includes some of the special characteristics of figures of speech in poetry. Instructional content is carefully programmed to guide the student to the correct answer. Either hints or explanations can be used. Lessons are modifiable by the teacher. Computer keeps complete individual and class records. Teacher's guide.

FLASH SPELL HELICOPTER

APPLE II DISKETTE ■■PIJH■■

1 Apple II Diskette, 48K; Backup.....$39.95

Exciting color graphics accompany this spelling/game program designed for all grade levels. A randomly selected word is flashed on the screen for ½-second. This continues until the student spells the word correctly. For each word spelled correctly the first time, the student earns ten seconds of game (helicopter) time. When the student chooses to stop spelling, she/he may play the helicopter game for the number of seconds earned. In order to play another game, the student must again earn time by spelling more words correctly. **Teacher may add to, change or edit word lists.** Teacher's guide.

FOUR WORD/WORD LIFT

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K.....$39.95

Four Word - Employing a seek and find method, students learn letter patterns and spelling skills. Players select letters from the alphabet to fill in hidden word squares. Play solo or in competition. **Word Lift** - Students learn the concept of alphabetizing words. Using the World Lift elevator, the player must move words from "floor to floor" until they are in alphabetical order. It's a race against the clock. Teacher's guide.

FUN WITH DIRECTIONS: EARLY LEARNING

APPLE II DISKETTE ■EP■■■■■

1 Apple II Diskette, 48K.....$49.95

No supervision necessary. Students take charge and learn that words are rows of letters, that letters must face a certain way, and that there is order to events – all key discimination skills critically important for early learners preparing to read. Colorful and animated formats sustain interest. You can modify degree of difficulty. Teacher's guide.

FUNDAMENTAL CAPITALIZATION PRACTICE

APPLE II DISKETTE ■■PIJ■■■

4 Apple II Diskettes, 48K.....$150.00

Provides practice and review in all the major capitalization skills. 24 highly effective lessons of three different types. *Skill Lessons* present the important rules of capitalization, one at a time. After several of the single-skill lessons, *Review Lessons* provide multi-skill practice. The *Editing Lessons* let students apply and extend their newly acquired skills. High interest content, with carefully controlled vocabulary at all levels. Special graphics reward students for good performance. Teacher's guide.

FUNDAMENTAL PUNCTUATION PRACTICE

APPLE II DISKETTE ■■PIJH■■

5 Apple II Diskettes, 48K.....$150.00

Provides instruction and practice in all major punctuation-usage skills for all students. More than 30 lessons in punctuation skills: periods; sentences; abbreviations and initials; question marks; commas; dates, addresses, quotes, conjunction, subordinate clauses, series, interrupters, pauses; exclamation marks; apostrophes; quotation marks; semicolons; parentheses. Each punctuation mark is first presented alone. After the skill has been mastered in several lessons, there are review lessons that present multi-skills practice. Incorrect responses must be corrected before next item will be presented. Controlled vocabulary levels. Teacher's guide each title.

FUNDAMENTAL PUNCTUATION PRACTICE, Grades 3-4
FUNDAMENTAL PUNCTUATION PRACTICE, Grades 5-6
FUNDAMENTAL PUNCTUATION PRACTICE, Grades 7-8

(Each title, 2 Apple II Diskettes, 48K.....$59.95)

GETTING READY

(Reading and Adding)

APPLE II DISKETTE ■EP■■■■■

1 Apple II Diskette, 48K; Backup.....$55.00

Award Winner, **Council for Exceptional Children Software Search – Early Childhood Category.** *Merit Award,* **Consumer Electronic Show.**

Sound, color and animation helps primary students identify and match shapes, upper- and lower-case letters and numbers. Every correct answer generates an imaginative on-screen reward. Teachers can customize the programs for individual or classroom needs by controlling selection of numbers and letters. Teacher's guide.

GOOFY'S WORD FACTORY

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K.....$39.95

Today, Goofy starts his new job at the word factory. As words move along the conveyor belt, it's his job to sort them out, dropping each in the chute where it belongs - nouns in the noun chute, verbs in the verb chute, and so on. He can carry each word to its proper chute, but that takes time. Or he can throw the words, but he'll have to watch out for passers-by. Goofy sure could use your help. If he does well, he may even get promoted. **Skill Focus:** Grammar/Parts of Speech; Sentence Construction. User's guide.

GRAMMAR EXAMINER

APPLE II DISKETTE ■■■IJ■■■

1 Apple II Diskette, 48K.....$44.95

Climbing a newspaper hierarchy can be a fun way to learn grammar. Students begin as cub reporters with The Grammar Examiner newspaper and learn to edit stories, gradually moving up in position and salary until they become the Editor-in-Chief. But they must watch their grammar and deadlines. They could be presented with a paragraph to edit or a multiple choice grammar question they must answer. Teaches important grammar skills in a fun and exciting way. Includes punctuation, capitalization, subject-verb agreement, pronoun-antecedent agreement, verb tenses, adverb and adjective usage and homonyms. Multiple skill levels. Over 150 multiple choice grammar questions and paragraphs, each with numerous grammatical mistakes to be edited, are built into the program. Provides hours of grammar practice. Teachers may add their own grammar problems. Teacher's guide.

GRAMMAR SERIES

APPLE II DISKETTE I

GRAMMAR I
1 Apple II Diskette, 32K; Backup.....$45.00
Recognizing and reinforcing parts of speech. The program randomly selects sentences and displays them on the screen. Each time the student presses the space bar, the program will display a word from the sentence in a box being held by a robot. The student indicates what part of speech it is and presses the return key. If he is correct, the robot jumps up and down. Contents: Recognition of Adjectives, Verbs, Adverbs, Pronouns, Nouns, Persons, Places or Things.

GRAMMAR II
1 Apple II Diskette, 32K; Backup.....$50.00
Tutorial. **Contractions** - detailed explanations, examples and drills. **Possessive Case** - includes explanations with numerous examples of pronouns and nouns. Drills. **Prefix/Suffix** - includes prefixes and suffixes and their meanings. Drills. **Spelling Rules** - teaches most of the spelling rules. Many examples. User selected drills.

GRAMMAR III
1 Apple II Diskette, 32K; Backup.....$50.00
Punctuation - covers period, comma, exclamation point, question mark, and colon. Includes rules and examples. Drill and practice. Requires student to insert correct punctuation in randomly selected sentences. **Capitalization** - capitalization rules utilizing numerous illustrations and examples. Drill and practice included. **Syllables** - drill and practice on syllable division. Student divides words into syllables. Immediate feed-back. Shows correct division if student is incorrect. **Commonly Confused Words** - student tries to match commonly confused words with their definitions. Improves vocabulary and spelling.

IDENTIFYING PARTS OF SPEECH

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95
Provides highly interactive guided drill in identifying parts of speech, and motivates students with an arcade-style reward game. Includes: identifying nouns; verbs; pronouns; adjectives; adverbs; and prepositions. A pre-set (by teacher) percentage of correct answers allows students to play an arcade-type game.

INTRODUCTION TO POETRY

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$29.95
Teaches rhyme and meter in a clear and simple tutorial format. Definitions are given on the screen and are sounded out by your computer. Highly interactive and easy to run. Teacher's guide.

JUNGLE RESCUE/SPELLING SERIES

APPLE II DISKETTE P I

The players are fire rangers attempting to rescue jungle animals in danger of destruction from a raging fire. Obstacles to the rescue mission can be eliminated by identifying correctly spelled words. To reinforce the lesson, players must choose the correct spelling, and type the word correctly themselves. Teacher utility allows the educator to enter additional spelling lists. 1-6 players. Teachers' guide each set.

JUNGLE RESCUE/SPELLING GRADES 1-4
JUNGLE RESCUE/SPELLING GRADES 5-8
(Each title, 1 Apple II Diskette.....$49.95)

KERMIT'S ELECTRONIC STORYMAKER

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$39.95
Allows children to create their own animated stories using the Muppets as actors. Teaching the rudiments of sentence structure while it builds vocabulary, the program has been enthusiastically received by the children with whom it was tested. This program lets kids make Kermit, Miss Piggy, Gonzo and the rest dance, fly spaceships, or sail boats in settings all the way from the ocean floor to the surface of the moon. Makes the child an active participant in the story's creation. User's guide.

KIDWRITER

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$29.95
"*...super program with great potential to inspire budding writers.*" **Run, Jan 1985.**
Your students can make colorful scenes, then write stories to go with them. There's music and a choice of 99 different characters and objects. While it encourages children to create word and picture stories, it introduces them to the fundamentals of word processing. It even lets them make stories that continue from one "page" to another. User's guide.

KNOWLEDGE BOWL SERIES

APPLE II DISKETTE J H

The Knowledge Bowl concept began to evolve in 1972 when a group of students expressed a need for more recognition of academic excellence in the schools. In response, an interdisciplinary contest was developed in which teams of students from several schools compete on the basis of general academic prowess. Teacher's guide with each set.

KNOWLEDGE BOWL SET A
8 Apple II Diskettes, 32K.....$168.00
This series of diskettes contains items that have appeared in previous Knowledge Bowls. Each disk consists of 400 strictly short-answer questions dealing with practically any significant educational topic.

KNOWLEDGE BOWL 1.....$27.00
KNOWLEDGE BOWL 2.....$27.00
KNOWLEDGE BOWL 3.....$27.00
KNOWLEDGE BOWL 4.....$27.00
KNOWLEDGE BOWL 5.....$27.00
KNOWLEDGE BOWL 6.....$27.00
KNOWLEDGE BOWL 7.....$27.00
KNOWLEDGE BOWL 8.....$27.00

KNOWLEDGE BOWL SET B
8 Apple II Diskettes, 32K.....$168.00
Brand new series designed for schools involved in academic competitions. Each disk includes 400 short answer questions on practically all secondary school curriculum . Ideally suited for team preparation for academic contests, as well as being of enormous interest to anyone who is enthusiastic about general knowledge. Entirely new and different from Set A.

KNOWLEDGE BOWL 9.....$27.00
KNOWLEDGE BOWL 10.....$27.00
KNOWLEDGE BOWL 11.....$27.00
KNOWLEDGE BOWL 12.....$27.00
KNOWLEDGE BOWL 13.....$27.00
KNOWLEDGE BOWL 14.....$27.00
KNOWLEDGE BOWL 15.....$27.00
KNOWLEDGE BOWL 16.....$27.00

KINDER KONCEPTS: READING SERIES

APPLE II DISKETTE P

1 Apple II Diskette, 48K (15 programs).....$65.00
Delightful reading readiness program developed by teachers and field-tested in numerous kindergarten classes. Colorful, interesting activities designed to teach letters, shapes, matching and many other skills. Large graphics, sound and on-screen motion keep children's attention. No reading is required and no time limit is imposed. Ten exercises for each concept presented. Correct responses receive immediate reward. After two incorrect responses, the computer gives the correct answer. On-screen graphics keep a running score for student's and teacher's reference. A delightful way to introduce the computer while enhancing reading readiness skills.

LANGUAGE SKILLS

APPLE II DISKETTE I J H

10 Apple II Diskettes, 48K.....$275.00
Introduces parts of speech, punctuation, capitalization, phrases and clauses and related aspects such as comparison of adjectives, kinds of nouns and kinds of verbs. Provides tutorial segment, gives examples and then completes lesson with a quiz. Management system on each disk. Teacher's guide.
- Nouns
- Pronouns, Language Skills
- Adjectives, Language Skills
- Verbs and Adverbs
- Verb Tenses (Past, Present, Future)
- Prepositions and Conjunctions
- Phrases and Clauses
- Word Choice
- Punctuation and Capitalization
- Possessive Case (Adjectives, Nouns, Pronouns)

(Each title, 1 Apple II Diskette.....$29.95)

LEARNING ABOUT SOUNDS IN READING

APPLE II DISKETTE E P

2 Apple II Diskettes, 48K.....$39.95
Begins with phonics, the building blocks of reading skills. It introduces the sounds of vowels and consonants in reading: short vowels, long vowels and initial consonants, the phonics skills necessary for the beginning reader to develop successful reading or to help improve reading of older students. User's guide.

LEARNING LINE

APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$39.95
Six games designed to teach children to match letters, numbers and objects, and to associate words with pictures. Using a joy stick or paddle, your student makes a curious monkey move and leap to grab the correct object hanging from The Learning Line.

LANGUAGE ARTS CUSTOMWARE

APPLE II DISKETTE P I

Dictionary skills, usage, figurative language, synonyms and antonyms -- those are just four of the nine skill strands covered in the program for grades 3-6. Each strand features five lessons with room on the disk to add five more lessons of your own. With the second disk you can also alter predeveloped lessons to fit your needs -- from making minor changes to revamping whole lessons! Two-disk customizing package includes Lesson disk -- containing five prepared lessons with room for five more -- and Creation disk -- use to add, change, or delete prepared lessons. Creation disk can be used to change lesson parameters, including scoring graphics; to name disks and lessons; to change printer specifications; and to provide disk sequencing IDs. Nine skill strands present lessons at three to four levels of difficulty, giving you a total of 15 to 20 lessons per strand. Gives simple, easy-to-follow procedures for customizing lessons. To use Creation disk must have two disk drives. Teacher's guide with each title.

PREFIXES AND SUFFIXES CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Prefixes and Suffixes Customware, Grade 3
- Prefixes and Suffixes Customware, Grade 4
- Prefixes and Suffixes Customware, Grade 5
- Prefixes and Suffixes Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

CAPITALIZATION AND PUNCTUATION CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Capitalization and Punctuation Customware, Grade 3
- Capitalization and Punctuation Customware, Grade 4
- Capitalization and Punctuation Customware, Grade 5
- Capitalization and Punctuation Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

ANALOGIES CUSTOMWARE
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Analogies Customware, Grade 3
- Analogies Customware, Grade 4
- Analogies Customware, Grade 5
- Analogies Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

SYNONYMS AND ANTONYMS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Synonyms and Antonyms Customware, Grade 3
- Synonyms and Antonyms Customware, Grade 4
- Synonyms and Antonyms Customware, Grade 5
- Synonyms and Antonyms Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

DICTIONARY SKILLS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Dictionary Skills Customware, Grade 3
- Dictionary Skills Customware, Grade 4
- Dictionary Skills Customware, Grade 5
- Dictionary Skills Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

SPELLING CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Spelling Customware, Grade 3
- Spelling Customware, Grade 4
- Spelling Customware, Grade 5
- Spelling Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

MULTIPLE MEANINGS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Multiple Meanings Customware, Grade 3
- Multiple Meanings Customware, Grade 4
- Multiple Meanings Customware, Grade 5
- Multiple Meanings Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

FIGURATIVE LANGUAGE CUSTOMWARE SERIES
Complete Series (3 Sets; 6 Diskettes).....$209.85
- Figurative Language Customware, Grade 4
- Figurative Language Customware, Grade 5
- Figurative Language Customware, Grade 6

(Each title, 2 Apple II Diskettes, 48K.....$69.95)

LEARNING ABOUT WORDS IN READING SERIES

APPLE II DISKETTE ■■[P]I■■■■

Complete Series (2 sets; 2 diskettes).....$79.90

"Sound and graphics are delightful..." **Teaching and Computers, Nov/Dec 1984.**

Reviews and drills on the structure of words. Includes prefixes, suffixes, contractions, synonyms, homonyms, possessives and syllabication. Most useful as a drill to supplement classroom instruction. Teacher's guide with each set.

LEARNING ABOUT WORDS IN READING 1 (Grades 1-3)
1 Apple II Diskette, 48K.....$39.95

LEARNING ABOUT WORDS IN READING 2 (Grades 2-4)
1 Apple II Diskette, 48K.....$39.95

LEARNING IMPROVEMENT

APPLE II DISKETTE ■■■■[J][H]■[A]

Complete Series (4 Sets, 4 Diskettes.....$165.00

Help students make the most of study time, get more out of their efforts, and enjoy better test scores. Each of the four programs may be individualized to your learner's reading/conceptual level (on level or below). Students can go back for review and reinforcement to further improve their skills throughout the whole school year. Teacher's guide with each set.

EFFECTIVE STUDY SKILLS: A LEARNING STYLE APPROACH
1 Apple II Diskette, 48K.....$44.95

This program actually determines how each of your students learns most effectively and then uses the results to offer an instructional presentation to suit the individual's needs. Students learn to maximize study efforts because you show them how to capitalize on their own best learning styles.

FOLLOWING WRITTEN DIRECTIONS
1 Apple II Diskette, 48K.....$44.95

Helps students realize the critical consequences of learning to follow written directions. Uses pictures, signs, and words to show learners the importance of following directions and what can happen if they are not followed precisely. Emphasizes multiple-step directions to best stimulate real-life conditions. Includes a challenging and exciting game based on following directions to capture and hold student's attention.

IMPROVING YOUR MEMORY
1 Apple II Diskette, 48K.....$44.95

A variety of specific methods for increasing memory that offer learners interesting experiences with each method. Students enjoy the challenge of improving their memories and get all the benefits of sound instructional design and proven learning methods.

STRATEGIES FOR TEST TAKING
1 Apple II Diskette, 48K.....$44.95

Teaches students how to be "test-wise" and master the techniques for succeeding at tests formatted as "True or False", "Multiple Choice", "Fill-in-the-Blank", "Short Answer", and even "Essay" tests. Students practice new skills by taking the various test types. Programs provide them with the help they need for getting ready for a test.

LETTERS AND WORDS

APPLE II DISKETTE ■■[E][P]■■■■■

1 Apple II Diskette, 48K.....$49.95

"The ingenious scoring and response systems are excellent examples of programming geared to the non-reader. Good job." **Creative Computing, Oct 1984.**

For early letter and word practice. **Game One** teaches alphabetizing of letters. **Game Two** is for matching of upper and lower case letters. **Game Three** focuses on sight words via a word and picture matching activity. Teacher's guide.

LIBRARY ADVENTURE SERIES

APPLE II DISKETTE ■■[P][I]■■■■

Students of all ages need to learn how to use reference materials in the library. This program helps children learn how to find many kinds of information available through library reference materials. Teacher's guide.

LIBRARY ADVENTURE PRIMARY
1 Apple II Diskette, 48K.....$49.95

LIBRARY ADVENTURE INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

LIBRARY IQ

APPLE II DISKETTE ■■■■[J][H][C]■

1 Apple II Diskette, 48K; Backup.....$50.00

Designed to teach library skills to junior high, senior high, or college students. Covers handling and common maintenance of AV software and equipment; definitions and descriptions of common terms and tools associated with AV equipment and software ordinarily found in school libraries and media centers; explains the use of the card catalog and drills students in the basics of using it; teaches basic skills needed to use the library -- including readers' guide to periodical literature and provides drills in definitions associated with using the library. Includes topics such as the vertical file, periodicals, and reference materials. Backup and teacher's guide.

LIBRARY RESEARCH SKILLS SIMULATION 1

APPLE II DISKETTE ■■■■[J][H]■■

4 Apple II Diskettes, 48K.....$99.95

A computer simulation game which puts the student in the library, teaching him where to look for things, where to find them, and how to use what he has found. Using full-color graphics and animation, this program gives the student a choice of six topics for research and a whole library in which to work. Areas include: the Card Catalogue, the Reserve Room, the Periodicals Room, the Non-print Media Collection and, of course, the Stacks. A computer librarian is available to give the student tutorial help. The student makes his way through the library at his own pace, but quickly learns the steps that can save the research hours in the library. Teacher-Management section. Teacher's guide.

LIBRARY SEARCH SKILLS

(How Can I Find It If I Don't Know What I'm Looking For?)

APPLE II DISKETTE ■■■[I][J]■■■

1 Apple II Diskette, 48K; Backup.....$55.00

Perfect program to help students learn valuable library skills. The program's question format leads the student through a series of branching operations to explore the resource of the library. An easy-to-use Change Option allows you to customize the program to include the reference books currently available on site at your school library. Helps student identify and locate specific books, facts, or other information needed. Increases students' skills as independent users of the library media center. Teacher's guide.

Your colleagues and the professional journals agree...Return-To-Reading LITERARY COURSEWARE is Outstanding!

"...an excellent aid to the teacher who wants to encourage independent reading for any level student. The questions are well designed to encourage personal reaction. Comprehension is reinforced because both correct and incorrect responses receive explanatory feedback."
School Library Journal

"Teachers may be assured that high standards of literature comprehension may be achieved with only limited teacher time required."
Curriculum Review

"This series of programs can be put to good use in an individualized reading or literature unit or in a reading laboratory. The questions vary in format and are well thought out for reasonable answers."
Booklist

"The courseware clearly reflects a sound understanding of the basic tenets of reading instruction and literary appreciation, and can be a vital step towards instilling the love of reading."
Electronic Learning

"Rated 'A' on educational usefulness, documentation and ease-of-use."
Software Reports

"My students said it is the single best tool in literature study I have given them."
Napoleon City School District, Ohio
Ken Neuenschwander, Language Arts Chairman

"This program received a high rating in useability and versatility."
Unified School District 320, Kansas

"I am delighted with the software."
Danville Community High School, Indiana

"...a masterpiece in educational material."
Fairfield Junior High School
Fairfield, Iowa

"Motivates students to read, study, and enjoy literature...Aids in developing confidence in their critical thinking skills."
Ohlone College Reading Lab, California

"Student errors are handled understandingly. Correct responses are nicely rewarded."
Powell Valley High School
Big Stone Gap, Virginia

LITERARY COURSEWARE

APPLE II DISKETTE ■■■[I][J][H]■■

"...excellent aid to the teacher who wants to encourage independent reading for any level student." **School Library Journal, Oct 1984.**

RETURN TO READING. Help your students get more out of the books they read! Even though teacher's time is limited, these programs allow each student to participate fully in individualized extended learning activities. Includes testing and measurement system. Best of all, it's fun! Students enjoy the responsive, interactive and self-paced computer activities. Advanced branching individualizes each lesson.

Each program consists of games and activities covering important elements of the book such as mood, setting, characterization and use of figurative language. Also includes comprehension questions on main ideas, details, sequence and vocabulary. Games and other exercises help students explore their feelings about the book, increases their understanding and appreciation, and encourages further reading.

Each program includes: 1 Apple II Diskette with backup, 16 page study guide, reproducible student response sheets, and a user's guide.

You will want several titles for your school collection.

Save on multiple purchases:
1-4 Titles, each title.....$70.00
5-9 Titles, each title.....$59.00
10-19 Titles, each title.....$55.00
Over 20 Titles, each title.....$49.75

ADVENTURES OF HUCKLEBERRY FINN
ADVENTURES OF TOM SAWYER
ALL QUIET ON THE WESTERN FRONT
ANIMAL FARM
BILLY BUDD
BLACK STALLION
BORN FREE
BRAVE NEW WORLD
CALL OF THE WILD
CHARLIE AND THE CHOCOLATE FACTORY
CHOCOLATE WAR
CRY THE BELOVED COUNTRY
DAY NO PIGS WOULD DIE
DIARY OF ANN FRANK
DRACULA
FAHRENHEIT 451
FAREWELL TO ARMS
FLOWERS FOR ALGERNON
GIANTS IN THE EARTH
GIFT OF THE MAGI/RANSOM OF RED CHIEF
GOOD EARTH
GREAT BRAIN
GREAT EXPECTATIONS
HEART IS A LONELY HUNTER
HOBBIT
JOHNNY TREMAIN
JULIUS CAESAR
LION, THE WITCH AND THE WARDROBE
LITTLE PRINCE
LORD OF THE FLIES
MARTIAN CHRONICLES
MIRACLE WORKER
1984
ODYSSEY
OF HUMAN BONDAGE
ONE DAY IN THE LIFE OF IVAN DENISOVICH
PEARL
PIGMAN
RAISIN IN THE SUN
RED BADGE OF COURAGE
RED PONY
ROMEO AND JULIET
SEPARATE PEACE
TALE OF TWO CITIES
TELLTALE HEART/CASK OF AMONTILLADO
TO KILL A MOCKINGBIRD
WHERE THE RED FERN GROWS
WHITE FANG/TO BUILD A FIRE
WUTHERING HEIGHTS

LITERATURE QUIZ SERIES

APPLE II DISKETTE ■■■■■H■■

5 Apple II Diskettes, 48K.....$105.00

Five disks, each containing 400 preprogrammed questions and answers will test and stimulate further study on all facets of literature. Questions are arranged by topic on the disks. Questions may be multiple choice, true/false, fill-in or short answer. Two games included on each disk. Immediate feedback and opportunity to review. Topics include: Forms and Elements of Literature, Literary Techniques, Drama, Poetry, Proverbs, World Authors, Mythology, Shakespeare, and the Bible.

LUCKY'S MAGIC HAT SERIES

APPLE II DISKETTE ■■PIJH■■

LUCKY'S MAGIC HAT MASTER

1 Apple II Diskette, 48K.....$39.95

Enter the land of leprechauns -- a world where riddles in pictures and words develop reading and memory skills. You'll be charmed when you meet Lucky, your jolly leprechaun guide. But watch carefully. Lucky's a tricky elf who amuses his friends with playful questions that call for *reading comprehension, sequential thinking, perception and memory skills*. Children can set their own pace or meet Lucky's timed challenge. With the authoring system you can design lessons or students can create puzzles to tickle their friends. Teacher's Guide.

Additional Subject Diskettes

LUCKY'S MAGIC HAT: EARLY SKILLS

1 Apple II Diskette, 48K.....$19.95

Practice for basic learning skills. Teacher's guide.

LUCKY'S MAGIC HAT: LANGUAGE SKILLS

1 Apple II Diskette, 48K.....$19.95

Helps strengthen reading comprehension skills. Teacher's guide.

LUCKY'S MAGIC HAT: PREP FOR THE SAT

1 Apple II Diskette, 48K.....$19.95

Guides student through some subject areas on the SAT. Ages 12 to 14. Teacher's guide.

MAGIC SPELLS®

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K.....$34.95

The most spell-binding spelling program around. Children unscramble and practice spelling words. Misty castles, devious demons and wise wizards guide children through a magical mystery tour of spelling. Teacher's notes.

Magic Spells is a trademark of The Learning Company.

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MAIN IDEA: READING COMPREHENSION

APPLE II DISKETTE ■■■IJ■■■

4 Apple II Diskettes, 48K.....$79.95

Effective reading comprehension program that teaches your students how to identify the central idea in their reading. Provides a concrete method for analyzing reading material that is simple, easy to remember, and readily applicable to different subject matters. Stresses a rigorous analytic approach. Readers learn to concentrate and focus on what they are reading. Multiple levels of remediation and tutorial help make it useful for high school remedial work also. Includes class-management section. User's guide.

MASTER MIND: READING

APPLE II DISKETTE ■■■■IJ■■■

4 Apple II Diskettes, 48K.....$139.95

A match game designed to improve reading skills. Includes easy-to-use customizer which allows teachers to put in their own 100 word match list, and up to 50 questions in the following reading skills: Sequence, Fact or Opinion, Details, Inference. As students make correct matches, the puzzle reveals parts of a reading skill questions. Extra points are gained by answering the skill questions. Six levels. Teacher's guide.

MASTER SPELL

APPLE II DISKETTE ■■PIJH■■

1 Apple II Diskette, 48K; Backup.....$43.00

A versatile package that allows you to enter your own word lists and design spelling lessons to meet individual needs. A separate spelling diskette is created by the *Master Spell* package for use by the learner. This spelling diskette can be used by an individual or a group of up to twelve learners. The lesson can be uniquely designed by controlling the method of presenting the word, feedback, remediation, and review. Eighteen word lists can be added on a weekly basis or all at once. Each word list can contain up to sixteen words. Ssentences using each word in context can be included. Also contains a management system that maintains a list of all misspelled words to be used to generate review lessons. Teacher's guide.

MICRO SPEEDREAD

APPLE II DISKETTE ■■■■■H■■

4 Apple II Diskettes, 48K.....$125.00

"What impresses us...are the developers' approach and the lessons' design and depth of detail...wise investment for those serious about improving their reading speed and comprehension to survive today's deluge of printed material." **InfoWorld, July 1984.**

Professionally developed. Ten learning modules approach speed reading as an information-gathering process. They offer in-depth explanations of techniques while providing extensive practice and practical applications. Provides reinforcement, encouragement and feedback as it employs speed reading strategies tested with students and professionals. Users proceed at their own pace. Pre- and post-testing evaluates current speed and comprehension, then adapts the program to meet the specific needs of the user. Comprehensive user's manual.

MICROZINE SERIES

APPLE II DISKETTE ■■■IJ■■■

Each issue of MICROZINE provides four interesting, exciting programs, which are an ideal introduction to the computer. Suitable for age 10 and up. Games and activities are designed with these objectives: Introduce children to various computer fundamentals; Improve reading skills; Help build vocabulary; Enhance imagination; Encourage creative thinking and reasoning skills. Teacher's guide with each set.

MICROZINE #1

1 Apple II Diskette, 48K.....$39.95

Titles include: *Haunted House,* interactive ghost story in which student is principal character; *Secret Files,* introduces concepts in information management; *Poster,* keyboard controlled graphics and sound composition program; and *Ask Me,* interactive interview with young actor from "E.T.".

MICROZINE #2

1 Apple II Diskette, 48K.....$39.95

Titles include: *Northwoods Adventure; Ride the Wind,* a tutorial program; *Melody Maker,* Music synthesizer; and *Word Ladder,* a word game.

MICROZINE #3

1 Apple II Diskette, 48K.....$39.95

Titles include: *Mystery at Pinecrest Manor; Logo Robot,* Programming game; *Bookstore,* Contains title, authors and description of 200 books children may be interested in; *Tag,* A fast-paced game requiring quick reflexes.

MICROZINE #4

1 Apple II Diskette, 48K.....$39.95

Titles include: *Adventure in the Microzone,* Decision making game; *Log-It,* Using computer for record keeping tool; *Ask Me,* Interview with computer-game designer; *Traps,* Action game.

MICROZINE #5

1 Apple II Diskette, 48K.....$39.95

Titles include: *Pirates of the Soft Seas,* Caribbean interactive adventures; *Story Teller,* Word/picture processor for creating stories and drawings; *Amazing Robot II,* Programming with LOGO-like language; *Fences,* Strategy game.

MICROZINE #6

1 Apple II Diskette, 48K.....$39.95

Titles include: *Fossils Alive,* Learning about fossils and prehistoric times; *Olympic News,* Simulated electronic newspaper allows children to read and write about the Olympics; *Free Store,* Data base full of many free (and almost free) things kids can write for; *Sound Off,* 40 sound effects to edit and play.

MIND OVER MATTER

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K.....$49.95

Fun and challenging word puzzles to solve and create. Especially suited for gifted and talented students in grades 2 and up. Teacher's guide.

MOVIEMAKER

APPLE II DISKETTE ■■■■JH■■

1 Apple II Diskette, 48K.....$49.95

"...adds the dimension of time to computer graphics..." **Personal Software, June 1984.** *"...a perfect tool for students interested in computer graphics or the film industry."* **Teaching and Computers, March 1984.**

This innovative tool allows anyone to become a director! No programming ability is necessary. The user devises the action, sets the scene, creates the actors, and plays back the completed computer "movie". A versatile and easy-to-use computer animation system which will bring out the artist and film-maker in your students. Requires joystick. User's guide.

SEPIJHCA **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

NEWBERY WINNERS

APPLE II DISKETTE ■■■IJ■■■

"...provides a welcome addition to microcomputer courseware for the language arts classroom." **Language Arts, Oct 1983.**

Team Newbery Award books with microcomputer activities and provide your students with an exciting extension of their reading experience. Each book is accompanied by one diskette containing four programs of vocabulary and comprehension drills and games. An instructional manual fills you in on everything you need to know, from loading the programs into the computer to printing out students' answers. A story guide for each book provides study synopses, reading levels and printouts of each program's contents. Optional printer.

Each title contains: 1 Apple II Diskette, 32K; Instruction Manual, Teacher's Guide. Price per title.....$25.00

Bridge to Terabithia.....$25.00
Call It Courage.....$25.00
Cricket in Times Square.....$25.00
Dark Is Rising.....$25.00
Great Gilly Hopkins.....$25.00
Island of the Blue Dolphins.....$25.00
King of the Wind.....$25.00
Mrs. Frisby and the Rats of NIMH.....$25.00
My Side of the Mountain.....$25.00
Slave Dancer.....$25.00
Sounder.....$25.00
Summer of the Swams.....$25.00
Westing Game.....$25.00
Witch of Blackbird Pond.....$25.00
Wrinkle in Time.....$25.00

NEWSROOM

APPLE II DISKETTE ■■■IJH■■

2 Apple II Diskettes, 48K.....$49.95

Lets you design, produce and print out your own newspaper for your family, club, class, or school. You can unleash your creativity (and for those who don't have loads of creativity, **The Newsroom** will help them look like they do) and create a newspaper with text and pictures that will look truly professional. Select from a library of over 600 pieces of clip art, combine them as you wish, alter them, or create your own unique pictures. Even add captions if you choose. Create distinctive banners. Position photos wherever you wish. Text will automatically rearrange itself around the photos. Completely control all design elements of your paper and print it on any popular computer printer using letter or legal size paper. 75-page illustrated Idea/Instruction Book.

ODD ONE OUT

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K; Backup.....$55.00

Teaches students to distinguish objects. Demonstrates principles of classification. Helps students find order and discover relationships by looking for patterns. The teacher has the option of specifying which letters or words the students are using, thus tying the activities to the classroom materials. Varying levels of difficulty provide students with increasingly challenging categorization problems. Teacher's guide.

101 MISUSED WORDS

APPLE II DISKETTE ■■■■JH■■

1 Apple II Diskette, 48K.....$39.00

The most commonly confused words, explained with clarity and conciseness. Over 600 practice sentences. Includes there/their/they're; passed/past; accept/except; raise/rise; among/between; set/sit; and many others. Includes a test-maker option. Teacher's guide.

PARTS OF SPEECH

APPLE II DISKETTE ■■■IJ■■■

1 Apple II Diskette, 48K; Backup.....$35.00

In this program, each of the parts of speech are illustrated with examples. Drills are provided in which the student must identify the part of speech for each of the words in randomly selected sentences. Scoring is provided at the conclusion of the drill and practice session.

PARTS OF SPEECH I

APPLE II DISKETTE ■■■IJ■■■

4 Apple II Diskettes, 32K.....$119.80

Four disks, one each for grades 3, 4, 5, and 6. The objective of this program is to provide practice in recognizing the part of speech of a given word. The name of a part of speech appears in the box. The student decides if the word beside the "eater" is used as that part of speech. Game-like setting; 10 lessons per disk; words incorrectly identified are listed at the end of the lesson. Includes: Nouns, Verbs, Adjectives, Adverbs.

PHONETIC EXERCISES

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K; Backup.....$43.00

Drills offer self-paced practice in language arts skills. Allows a student to work through a set of predetermined phonetic exercises in sound associations, affixes, syllables, contractions, and homonyms. Teacher's guide.

PARTS OF SPEECH PLUS

APPLE II DISKETTE P I J

Good programs with a "Plus" -- Teachers may easily modify the programs to make them fit the needs of the students. Complete record keeping for the class or individuals. Although developed and tested for elementary children, these programs are very helpful to remedial secondary and Adult Literacy students. Teacher's guide with each set.

ADJECTIVES PLUS
1 Apple II Diskette, 48K.....$39.95
Multi-level lessons include identification of adjectives, possessive nouns, possessive pronouns, adjective endings, using articles and adjectives; identification based on position in a sentence, and use. The lessons are graduated in difficulty. Incorrect answers are followed by hints which guide the student to the correct answer, or explanations when appropriate.

ADVERBS PLUS
1 Apple II Diskette, 48K.....$39.95
Lessons are graduated in difficulty. If a child makes an incorrrect answer, a hint may be given to guide him/her toward the correct answer. Explanations may be used for incorrect answers.

NOUNS/PRONOUNS
1 Apple II Diskette, 48K.....$32.95
Comprehensive, multi-level, idea for individualizing instruction. A concept or rule is introduced, followed by practice which requires the students to apply the rule they have just learned. Includes: identification of nouns, selecting correct plural ending of regular and irregular nouns, appropriate possessive form, and correct possessive pronoun or object pronoun.

VERBS PLUS
1 Apple II Diskette, 48K.....$32.95
This is an excellent program for providing individualized instruction on the correct use of verbs. The skills included are those which are most frequently identified as difficult for students. Includes: identification of verbs; agreement of subject and verb; identification of past, present and future forms of regular and irregular verbs; correct usage of past, present and future forms; contractions; exceptions such as money, collective nouns, subjects joined by "or", fractions, intervening phrases; and others.

VERB USAGE 1
1 Apple II Diskette, 48K.....$29.95
Developed by a remedial reading teacher to provide students with extra practice needed on the correct use of verbs. Teacher can easily modify any of the lessons. Each lesson introduces commonly misused verbs. Student must discriminate between the present, past, past participle, and infinitive form of the verb. Includes: do, see, go, eat, take, give, blow, grow, know, throw, run, come, ring, sing, begin. For grades 1-4.

VERB USAGE 2
1 Apple II Diskette, 48K.....$29.95
Includes: ride, drink, speak, break, choose, swim, freeze, drive, tear, wear, fly, write, bring, draw, shake. For Grades 3-5.

VERB USAGE 3
1 Apple II Diskette, 48K.....$29.95
Includes: steal, fall, swing, say, be, is/are, was/were, isn't/aren't, wasn't/weren't, doesn't/don't. For Grades 3-6.

PIK-PEK-PUT SERIES

APPLE II DISKETTE I

Complete Series (8 Sets; 8 Diskettes).....$227.50
Students put their word skills to work against the computer in a game of strategy much like Tic-Tac-Toe. The Pik-Pek-Put grid has a word in each of its squares. Students choose the square they wish to mark by moving the cursor, then affixing the word in the square. A correct response gets an X. A wrong answer gets no mark. The computer then takes its turn, choosing the square missed by the student or any other unplayed square and affixing a word to mark an O. First to get three in a row wins. The computer provides basic instruction in the skill needed to play each game and allows the teacher to quickly review the student's performance. Teacher's guide each set.

PIK-PEK-PUT: SUFFIXES 1
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: SUFFIXES 2
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: PREFIXES 1
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: PREFIXES 2
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: CONTRACTIONS
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: BASE WORDS
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: PLURALS
1 Apple II Diskette, 48K.....$29.95

PIK-PEK-PUT: POSSESSIVES
1 Apple II Diskette, 48K.....$29.95

PHONICS PINBALL

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$34.99
Strengthens essential word attack skills and motivates children to succeed. Covers beginning and ending consonants, short vowels, long vowels, consonant blends, consonant digraphs, R-controlled vowels and vowel diphthongs for comprehensive phonics support. Accommodates individual differences and supports multiple skill levels. Colorful high resolution graphics. Teacher's guide.

POETRY EXPRESS

APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K.....$39.95
A new approach to teaching poetry. Six poetry styles are easy to create with help from the computer. Teacher's guide.

PRE-READING/COUNTING

APPLE II DISKETTE E P

1 Apple II Diskette, 48K; Backup.....$46.00
Unique nine-part primary diskette adds fun and magic to teaching pre-reading skills. Youngsters learn letter recognition and alphabetical ordering in **Caterpillar** and **Train**. Initial consonant identification is covered in **A Is For Apple**. **Pictures, Words,** and **Shapes** challenge the memory of young learners in fascinating games of concentration. Three arithmetic programs, **Smile, Wuzzle,** and **Spaceship**, turn counting and addition into fun activities. Teacher's guide.

PREFIXES

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Backup.....$45.00
Lessons and drills on the five most commonly used prefixes, un-, re-, dis-, pre-, and in-, are presented in a format that rewards young learners and encourages the development of language and keyboard skills. Activities and worksheets. Visual reinforcement in the character of a fire-breathing dragon and a space creature enlivens learning. Teacher's guide.

PREFIXES/SUFFIXES/BASE WORDS SERIES

APPLE II DISKETTE P I

Complete Series (3 Sets; 3 Diskettes); Backups.....$90.00
Provides controlled-vocabulary, instruction and practice in these important reading skill concepts. Each disk contains two levels of prefixes, two levels of suffixes, and two levels of base words. Each level features Pre-test/Content Area/Tutorial Screens/ and Post Test plus a concentration game for Prefixes, Suffixes, and Base Words. Immediate positive feedback for all student responses. Backup; Guide.

PREFIXES/SUFFIXES/BASE WORDS 1 (Grades 2.5-4.9)
PREFIXES/SUFFIXES/BASE WORDS 2 (Grades 4.0-5.9)
PREFIXES/SUFFIXES/BASE WORDS 3 (Grades 5.0-6.9)
(Each title, 1 Apple II Diskette, 48K; Backup....$35.00)

PUNCTUATION AND CAPITALIZATION Grades 1-8: Series

APPLE II DISKETTE P I J

Complete Series (6 Sets; 6 Diskettes).....$174.95
User-oriented programs enable students to edit sentences to correct errors in punctuation and capitalization. No typing skill is required. Changes are made by selecting changes from a menu of choices. **Features:** Carefully graded sequence of skills; 10 lessons per grade level; Covers skills included in most standardized tests; Complete user control; Automatic error checking; Self-scoring -- immediate feedback upon lesson completion; Examples given -- easy to use. Teacher's guide. A Micro School Program from Bertamax, Inc.

PUNCTUATION AND CAPITALIZATION, Grades 1-3
PUNCTUATION AND CAPITALIZATION, Grade 4
PUNCTUATION AND CAPITALIZATION, Grade 5
PUNCTUATION AND CAPITALIZATION, Grade 6
PUNCTUATION AND CAPITALIZATION, Grade 7
PUNCTUATION AND CAPITALIZATION, Grade 8
(Each title, 1 Apple II Diskette, 32K.....$34.95)

PUNCTUATION SKILLS SERIES

APPLE II DISKETTE I J

"...makes learning about this subject fun..." **Educational Technology, July 1982.**

Well- designed program with excellent supplemental materials including 36 page manual and tablet of reproducible worksheets and tests. *NOTE: These programs will not work on the Apple IIc.*

PUNCTUATION SKILLS: COMMAS
1 Apple II Diskette, 48K; Worksheet.....$49.95
Program includes introductory elements, items in a series, interrupting elements, independent clauses, dates, addresses, letters, and titles.

PUNCTUATION SKILLS: END MARKS, SEMICOLON AND COLON
1 Apple II Diskette, 48K; Worksheet.....$49.95
Includes period, question mark, exclamation point, semicolon (2 skills), and colon.

PUZZLER

APPLE II DISKETTE I

1 Apple II Diskette, 48K; Backup.....$55.00
Five intriguing "mystery" stories that actively engage students in the problem-solving process of reading for meaning. The students use the reading strategies of predicting, confirming, and integrating to solve each story puzzle. At the end of the stories, students enter their solutions. (More than one answer is possible for each story.) The program focuses on comprehension and the creative expression of ideas. Teacher's guide.

READ ALONGS WITH MICRO ACTIVITIES

APPLE II DISKETTE P I

Each title includes a popular 48 page I Can Read book, plus a read-along audio cassette that follows the book word-for-word, plus a micro-software program disk that's keyed to the book. The micro-software program disk features fun-filled computer activities that focus on reading and learning skills -- like word attack, vocabulary development, and reading comprehension. They put the spotlight on synonyms, antonyms, and homonyms...word definitions...context clues...and comprehension. Students build strong reading and language skills every time they play and they'll keep on playing -- because these learning games are fun to play! Teacher's guide.

Each title contains: 1 Apple II Diskette, 48K; Book; Audio Cassette; Teacher's Guide.

ALLIGATORS AND CROCODILES.....$39.95
BIRDS.....$39.95
CREATURES OF THE NIGHT.....$39.95
CATS AND KITTENS.....$39.95
DOGS AND PUPPIES.....$39.95
HORSES.....$39.95
INDIANS.....$39.95
REPTILES.....$39.95
SEASONS.....$39.95
WHALES AND DOLPHINS.....$39.95
FIRST THANKSGIVING.....$39.95
PAUL BUNYAN.....$39.95
PECOS BILL.....$39.95
THUNDER AND LIGHTNING.....$39.95
MOTORCYCLES.....$39.95

READER RABBIT AND THE FABULOUS WORD FACTORY®

APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$39.95
A completely new approach to teaching pre-reading and early reading skills to tots. Children learn the essentials for reading. A playful, mischievous character in a bustling factory will inspire children to begin reading almost overnight. Teacher's notes.

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READING COMPREHENSION: MAIN IDEAS AND DETAILS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$49.95
Programs include recognizing topic sentences, listing supporting details, summarizing main ideas, choosing titles, and evaluating details. Includes excellent teacher's guide and a tablet of reproducible worksheets and tests. *NOTE: Will not work on the Apple IIc.*

READING FUN WITH CHARLIE BROWN AND SNOOPY

APPLE II DISKETTE P I

CHARLIE BROWN'S ABC'S
1 Apple II Diskette, 48K.....$39.95
Ages 3-7. Young children will enjoy exploring the alphabet with Charlie Brown, Snoopy, Lucy and all their friends. Uses delightful animation to introduce children to letters and words. Shows both upper and lower case letters; Contains life-like animated sequences; Teacher's guide.

SNOOPY'S READING MACHINE
1 Apple II Diskette, 48K.....$39.95
Ages 4-8. Designed for children who know the alphabet and are ready to learn how letters are the building blocks of words.The Peanuts® gang makes learning about word families fun. When a child adds the letter B to AT, Charlie Brown appears and swings his BAT. Add C to AT and Snoopy chases a CAT. Add J to IG and Snoopy dances and dances. Teaches five word families: et, ig, op, ug; 25 different words to create. Teacher's guide.

SNOOPY'S SKYWRITER SCRAMBLER
1 Apple II Diskette, 48K.....$39.95
An exciting game that tests your wits and skill with words. The goal is to make as many words as you can from the letters in Snoopy's challenge word. Over 40 different challenge words or design games by entering your own words. Teacher's guide.

Peanuts and Snoopy Characters® 1950, 1952, 1958, 1960, 1965, 1966, 1968. United Feature Syndicate, Inc.

READING COMPREHENSION: WHAT'S DIFFERENT?

APPLE II DISKETTE ■■■[I][J]■■■

1 Apple II Diskette, 32K.....$24.95

"Performance: Flawless." **Courseware Report Card, Sept 1982.**

Select the word that doesn't belong in the series. Analytical skill and reading comprehension are the keys to mastering the challenge. Course contains a total of 200 exercises. Ages 8 and older. Teacher's guide.

READINESS SKILLS

APPLE II DISKETTE ■[E][P]■■■■■

Developed by specialists in Early Childhood Education, these programs address specific skills and are curriculum based. Because the users of these programs are younger, the graphics are colorful and fun to use, but they are not games. They are learning materials designed to be used by individual students or small groups. Comprehensive teacher's handbook includes reinforcement activities and testing materials. Your students will have fun with these materials, and you will be pleased that they are learning.

CLASSIFICATION: READINESS SKILLS
5 Apple II Diskettes, 48K.....$145.00
Classification: Matching - Matching and comparing objects, shapes and colors.
Classification: Sorting - Sorting objects into group families.
Classification: Forms and Objects - A variety of physical attributes are used in combinations and alone.
Classification: Familiar Settings - Classifying items found at home and in school.
Classification: Settings - Variety of settings for classifying objects and animals.
(Each title, 1 Apple II Diskette.....$29.95)

ORDERING/SEQUENCING
4 Apple II Diskettes, 48K.....$115.00
Ordering/Sequencing: Seriation - Arranging objects into simple seriation patterns according to size and time sequence.
Ordering/Sequencing: Patterning - Identifying, constructing and completing simple to complex patterns.
Ordering/Sequencing: Complex Patterns - Construction and completion (multi-directions, more than 3 attributes).
Ordering/Sequencing: Size and Time - Subtle size and time sequences requiring completion and ordering.
(Each title, 1 Apple II Diskette.....$29.95)

SPATIAL RELATIONSHIPS: READINESS SKILLS
8 Apple II Diskettes, 48K.....$230.00
Spatial Relations: Geometric Shapes - Recognition and construction of geometric shapes.
Spatial Relations: Left to Right - Left to right progression.
Spatial Relations: Letters - Letter recognition and formation.
Spatial Relations: Geometric Forms - Construction and practice with complex 2 dimensional forms.
Spatial Relations: Symmetry - Construction and identification of symmetrical designs.
Spatial Relations: Rotation - Rotating objects and shapes; forming complex patterns.
Spatial Relations: 3 Dimensions - Introduction of 3 dimensional shapes.
Spatial Relations: Concepts - Beside, in front of, behind, around, through.
(Each title, 1 Apple II Diskette.....$29.95)

COUNTING SKILLS
9 Apple II Diskettes, 48K.....$260.00
Counting Skills: One to One - One to one correspondence.
Counting Skills: Number Recognition - Ordinal and cardinal.
Counting Skills: Beginning Sets - Beginning set theory.
Counting Skills: Number Recognition 5-10 - Recognition and formation of numerals 5-10.
Counting Skills: Matching - Matching numerals 5-10 to sets of objects.
Counting Skills: Sets—Equal and Joining - Identifying equal sets and presentation of joining sets.
Counting Skills: Number Recognition 10-20 - Recognition and formation of numerals 10-20.
Counting Skills: Assigning Numbers - Assigning numerals 10-20 to correct number of items.
Counting Skills: Addition and Subtraction - Single digit addition and subtraction using pictures along with numerals.
(Each title, 1 Apple II Diskette.....$29.95)

LANGUAGE ARTS
5 Apple II Diskettes, 48K.....$145.00
Language Arts: Letter Recognition - Recognition and formation of lower case manuscript letters.
Language Arts: Letter Matching - Matching upper and lower case manuscript letters.
Language Arts: Word Families - Introduction to and formation of word families (at/et/it/en/and).
Language Arts: Beginning Consonants - Identifying beginning consonant sounds of familiar objects.
Language Arts: Rhymes - Identifying rhyme labels through the use of pictures.
(Each title, 1 Apple II Diskette.....$29.95)

READING MACHINE

APPLE II DISKETTE ■[E][P]■■■■■

2 Apple II Diskettes (Program and Picture Disks) 48K; Backup; Student Record forms.....$59.95

Covers reading skills typically taught in kindergarten thru third grade and is also beneficial for gifted pre-school children and older remedial students. Phonetic approach corresponds to elementary reading series used throughout the country. Over 28 skill levels sample the basic reading domain: upper and lower case letter matching, letter sequencing, beginning and ending consonants, short and long vowels, consonant blends and digraphs, and vocabulary. Record keeping system permits convenient progress reviews. Large size upper and lower case letters used throughout to improve readability. After the student has achieved the required number of correct answers, he gets to select from six arcade-type games. Each game runs approximately one minute before returning to the lesson. Game provides eye-hand coordination and motivation to succeed. Comprehensive teacher's manual. Classroom management system.

RELEVANT READING THROUGH SCIENCE SERIES

APPLE II DISKETTE ■■[P][I][J]■■■

Complete Series (4 Sets, 4 Diskettes).....$115.00

Help students get more out of their science text. Versatile, branched comprehension program for students needing practice in content reading skills. Each diskette contains 10 science reading selections which are followed by questions covering skills such as Recalling Facts, Locating Main Idea, Using Context Clues, Maze Comprehension, Cloze Comprehension, Identifying the Subject and Word Attack. Management System helps teacher identify skill weaknesses. Readability Level based on Fry Readability scale. Teacher's guide.

RELEVANT READING THROUGH SCIENCE 1 (Reading Levels 1-2)
RELEVANT READING THROUGH SCIENCE 2 (Reading Levels 3-4)
RELEVANT READING THROUGH SCIENCE 3 (Reading Levels 5-6)
RELEVANT READING THROUGH SCIENCE 4 (Reading Levels 7-8)
(Each title, 1 Apple II Diskette, 48K.....$29.95)

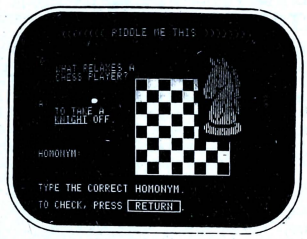
REMEMBER

(Memory Skills)

APPLE II DISKETTE ■■■■[J][H]■■

1 Apple II Diskette, 48K.....$79.95

A powerful learning tool that every student from junior high through adult needs for studying and remembering facts, lists, sequences, and relationships. Powerful, yet easy to use. Promotes long-term retention required in a wide variety of subjects, including history, English, foreign languages, chemistry, biology, physics and other academic and non-academic subjects. Add whatever subject matter you need to study and, with the help of built-in instructions and tools for improving recall, you can practice and test yourself until you remember it all. Teacher's guide.



RIDDLE ME THIS SERIES

APPLE II DISKETTE ■■■[I]■■■■

Complete Series (3 Sets; 3 Diskettes).....$85.25

Best Microcomputer Software of the Year, **Learning Magazine.** *Learning Computer Software Awards,* **Jan 1984.**

Combines sheer enjoyment with solid achievement in basic reading skills. The computer becomes a riddler, arousing curiosity and challenging students' word recognition skills. Graphics heighten enjoyment of the riddles. Students may be asked to type the correct two-word form of a contraction, to think of a homonym, or to type a possessive showing the relationship between two things mentioned in the riddle. The computer provides basic instruction in each specific word skill needed to participate in the program and allows the teacher to quickly review the student's performance. Teacher's guide with each set.

RIDDLE ME THIS: HOMONYMS
RIDDLE ME THIS: CONTRACTIONS
RIDDLE ME THIS: POSSESSIVES
(Each title, 1 Apple Ii Diskette, 48K.....$29.95)

RETURN OF HERACLES

APPLE II DISKETTE ■■■■[I][J][H]■■

1 Apple II Diskette, 48K.....$32.95

"The graphics, sound, playability, and the amount of research into Greek mythology that went into this game are top notch." **Analog Computing.**

A role playing game. One or more players controls up to 19 heroes and heroines using joysticks or keyboard. Learn about Greek mythology while attempting to complete the twelve difficult and dangerous tasks assigned by Zeus.

ROOTS AND SUFFIXES

APPLE II DISKETTE ■■■■[J]■■■

1 Apple II Diskette, 48K; Backup.....$39.95

Illustrates and teaches spelling change rules for combining roots and suffixes. Students may select one of three categories of rules to learn and practice, then they apply the rule to an example. Then s/he will proceed to an exercise that will draw from hundreds of different combinations of roots and suffixes. In the exercise, s/he is asked to combine roots with suffixes and to separate words into their roots and suffixes. Analysis of all errors with example of the correct rule is given. Generates quizzes similar to program examples. Guide.

SCRAMBLED WORDS/ ALPHABETIZING SERIES

APPLE II DISKETTE ■■[P][I]■■■■

Alphabetical sequence has never been easier to teach and reinforce. Choose play at 4 different levels of difficulty. Proficiency grows as students place words, move words, challenge or pass. Performance summaries make it possible and practical for you to focus attention where your help is needed. Fun and solid learning support for all your students.

SCRAMBLED WORDS/ALPHABETIZING PRIMARY
1 Apple II Diskette, 48K.....$49.95
SCRAMBLED WORDS/ALPHABETIZING INTERMEDIATE
1 Apple II Diskette, 48K.....$49.95

SENTENCE COMMAND GRAMMAR

APPLE II DISKETTE ■■■■[J]■■■

2 Apple II Diskettes, 48K.....$79.95

A computer program which makes order out of the laws governing the parts of speech and the parts of a sentence. The program is compatible with *Warriner* and other grammar texts. Addresses the student's need to understand the elements of correct grammar in the face of the perceived wisdom that grammar is a less than thrilling subject of study. Reviews the parts of speech and then moves on to: the sentence, complete subject and predicate, simple subject and predicate, complements of the predicate, direct object, indirect object, predicate nominative and predicate adjective. Provides the student with a precise working definition of the sentence part being studied. Following a clear, step-by-step method, the student learns to classify any element of a sentence by using a checklist. Excellent remediation program for the student who has difficulty with grammar. Class-Management section provides the teacher with a print-out of student progress. Teacher's guide.

SHAKESPEARE STUDIES

APPLE II DISKETTE ■■■■■[H]■■

Computer activities that teach your students the vocabulary and Shakespearean usage, quiz them on the characters and the most famous lines. These programs help your students learn and remember (and enjoy!) the mechanics and the background information of *Hamlet* and *Macbeth.* Each title contains:

* *A Rose By Any Other Name:* 60 vocabulary words from that play -- a combination of Elizabethan words not in common usage, words strange in context, and words that are considered difficulty. For each word there is at least one synonym, a definition, an example of the word in a prose context, and the source within the play.
* *What's In A Name:* 20 examples of metaphor or simile, which the student must match with the image described.
* *Who Goes There:* 10 characters from the play which are to be matched with adjectives describing them.
* *Who Said That:* Students must identify the characters who speak 10 famous quotes from the play.
* A final quiz which grades students on the information they have retained -- including correct spelling!

Teacher-Management program with print-out of individual student scores and class performance as a whole. Teacher's manual lists the vocabulary, imagery, characters and quotes, and explains the simple rules for operating the program. Fun even for students who think of Shakespeare as an assignment and not a pleasure. Teaches the facts with all the stylishness and verve of an arcade game.

HAMLET: MYSTERY AT ELSINORE
MACBETH: BANQUO'S REVENGE
(Each title, 2 Apple II Diskettes, 48K.....$69.95)

SAT AND STANDARDIZED TEST PREPARATION

ACT REVIEW

APPLE II DISKETTE H

2 Apple II Diskettes, 64K.....$69.95

Helps students prepare for the American College Testing (ACT) College Entrance Examination. Contains: Over 25,000 drill and practice questions;. Strategies on how to answer the various types of questions; Section on "How to Prepare" for the exam; Scores calculated at the end of each section on screen and printer; Correct answers are given as well as explanations as to why the other choices are wrong. Instruction manual includes glossaries on mathematics, social sciences, and natural sciences. Includes sections on: English Usage; Math Usage; Social Studies; Natural Sciences; and Reading Comprehension.

COMPUTER A.C.T. PREPARATION

APPLE II DISKETTE JH

3 Apple II Diskettes, 48K; Textbook.....$89.95

The American College Testing Program is taken by 500,000 high school students. This unique learning package combines software, a 480-page textbook and user's manual. Four complete tests in the textbook are taken on the computer and are timed, scored and diagnosed. An individualized study plan is devised to help the student in his/her weakest areas. Includes both verbal and math sections. Drill sections in the program are designed to improve reading comprehension and develop test-taking skills. User's guide.

COMPUTER SAT

APPLE II DISKETTE JH

2 Apple II Diskettes, 48K; Book.....$79.95

Here is the SAT preparatory course that can significantly raise actual test scores. And what's more -- It's Fun! Combines test-taking with diagnosis of results, prescription for improvement, and drill exercises for increased learning and speed. Includes detailed diagnostic appraisal of student performance in all test areas. Provides a section-by-section individualizd study plan custom tailored to each student's needs. 540 drill items and 1000 electronic vocabulary flash cards provide immediate feedback and overall score. Presents successful strategies and builds general test-taking skills. Each student controls the rate at which all material is presented. Progress directly correlated to the student's own ability. Slow learner does not fall behind and the advanced student can quickly leave those parts of the exam that are "too easy". Provides a series of explanatory strategies which not only explain a specific answer but develop general test-taking skills that insure future success. When students complete this program they will be totally prepared for the examination that lies ahead. They know what type of questions to expect and the proven strategies for answering them. They've had valuable practice that has significantly raised their level of performance. These students have developed the necessary test-taking skills that lead to a sense of calm and confidence on the day of the actual SAT. Includes a 470 page manual "How to Prepare for the SAT" and a User's Manual.

COMPUTER SAT STUDY PROGRAM

APPLE II DISKETTE H

3 Apple II Diskettes, 48K; 3 Books.....$89.95

Barron's SAT preparation program from "the people who wrote the book". Includes 3 books (the main volume, a mathematics workbook and a verbal workbook), plus a user's manual. The software is interactive with the books. You read the question/problem in the book and indicate, on the computer the letter of your answer. The Sample Test, of which there are 3, give you: the correct answer, a complete explanation of the correct answer, explanations of wrong answer choices (for verbal questions), problem-solving strategies (for math questions), and, a hint and a second chance to correct a wrong answer. Test Mode is timed just as on the actual SAT. Gives your score and an analysis of your strengths and weaknesses.

ENGLISH ACHIEVEMENT SERIES: *See write-up this section.*

LOVEJOY'S PREPARATION FOR THE SAT

APPLE II DISKETTE JH

2 Apple II Diskettes, 48K; Book.....$69.95

Provides comprehensive preparation for the SAT and the most up-to-date guide to college admissions, both from America's most trusted name in high-school guidance counseling. Includes: Two practice exams designed to accurately simulate the real SAT; 27 separate practice modules, on everything from analogies to trigonometry; Extensive help screens, including an on-screen "scratch pad" and four-function calculator; Utility program which both calculates projected SAT scores and creates bar-graphs of scores and progress; Over 120 pages of tips and strategies for taking the SAT; and An easy-to-use review format which shows the student both wrong and right answers...and why the correct answer is correct. Also includes a pocket edition of *Lovejoy's College Concise Guide.*

MASTERING THE SAT

APPLE II DISKETTE JH

4 Apple II Diskettes, 48K.....$150.00

A private tutor that helps college bound students score better on the Scholastic Aptitude Test. Developed in conjunction with the National Association of Secondary School Principals. Pre-tests students, points out weaknesses, then patiently and thoroughly helps strengthen those areas. Gives strategies on how to arrive at solutions. User's guide.

OWLCAT SAT PREPARATORY 60-HOUR COURSE

APPLE II DISKETTE H

9 Apple II Diskettes, 48K; 4 Manuals.....$249.95

Educator designed to interest all students -- even the reluctant ones. Contemporary language, sound effects and graphics enliven the presentation. An optional feature allows students to practice with one another. 60-hour course includes four programs, each with 3 levels of difficulty. Teaches students to follow directions, familiarizes them with the kinds of questions they will face on the SATs, helps diagnose and strengthen areas of weakness by reviewing and correctng wrong answers. Programs include: **S.A.T. Verbal** - vocabulary, sentence completion, reading comprehension and analogies; **S.A.T. Math** - includes algebra and geometry; **Test of Standard Written English; P.S.A. T. Diagnostic Pre-Test.** Manuals accompany each program.

Also Available:

OWLCAT SAT PREPARATORY 15-HOUR COURSE

4 Apple II Diskettes 48K; Manual.....$89.95

For students with limited time to study.

PERFECT SCORE: COMPUTER PREPARATION FOR THE SAT

APPLE II DISKETTE JH

6 Apple II Diskettes, 48K.....$69.95

Flexible, self-paced and interesting preparation for the SAT and PSAT. Covers all subject areas. Written by educators. Field-tested. Includes both testing and learning modes, sample tests and practice tests, continuous on-screen clock, manual with test taking stategies and print-out capabilities. Double-sided disks.

PSAT/SAT ANALOGIES

APPLE II DISKETTE H

1 Apple II Diskette, 48K.....$29.95

Develops skills tested in the analogies portion of college entrance examinations. Word relationships, meanings, and achieving under test-taking conditions are stressed. Guide.

PSAT WORD ATTACK SKILLS

APPLE II DISKETTE JH

2 Apple II Diskettes, 48K.....$29.95

These tutorial programs prepare the user for the "antonyms" portion of the Scholastic Achievement Test by developing skill in word definition, word connotations, knowledge of roots and prefixes, application of word analysis skills and familiarity with the SAT format. A timed test reviews each lesson, preparing the users to function under pressure. The final review lesson lifts words from previous lessons and presents them in modified form so that users must apply word attack skills. The User's Guide clarifies the system's operation, familiarizes test-takers with problems they can expect to encounter on the antonyms portion of the PSAT, and recommends strategies for mastering word attack skills. Guide.

SAT SCORE IMPROVEMENT SERIES

APPLE II DISKETTE IJ

Complete Series (3 Sets, 7 Diskettes).....$99.95

Three sets with 2 parts each, designed to help you raise your SAT scores. Includes both simulated SAT exams and complete reviews of each subject. Teacher's guide with each set.

SAT SCORE IMPROVEMENT: SAMPLE TEST

2 Apple II Diskettes, 48K.....$19.95

Includes: Analysis of the SAT -- its organization and scoring, plus test-taking strategies and tips for raising one's score; a diagnostic-prescriptive Pre-Test for determining strengths and weaknesses in the Mathematical and Verbal sections of the SAT; sample SAT exams with complete Mathematical and Verbal sections timed and formatted according to the latest SATs and scored on the SAT scale.

SAT SCORE IMPROVEMENT: VERBAL

2 Apple II Diskettes, 48K.....$39.95

Includes: Thorough review of antonyms, analogies, and sentence completions, and strategies and practice in reading passages and responding to questions about the materials just read.

SAT SCORE IMPROVEMENT: MATH

3 Apple II Diskettes, 48K.....$39.95

Includes: Instruction and practice in solving the entire range of algebra problems found on the SAT; instruction and practice in solving geometry problems; and a Quantitative Comparisons and Word Problems section which covers all the remaining subjects in the Mathematical section of the SAT.

SNOOPER TROOPS SERIES

APPLE II DISKETTE I J

Complete Series (2 Sets; 2 Diskettes).....$65.90

"...stresses logical reasoning and hypothesis testing in an adventure-game format." **Popular Computing, March 1983.** *"...exceptionally well done, highly motivational, and valuable in helping users learn to take notes and analyze relevant information."* **Creative Computing, April 1983.**

Snooper Troops detective games help children learn to take notes, draw maps, classify and organize information and help develop vocabulary and reasoning skills. Ages 10-adult. Offers the challenge and excitement of solving a mystery and features full color graphics and sound. Teacher's guide.

SNOOPER TROOPS I

1 Apple II Diskette, 48K.....$32.95

The Granite Point Ghost.

SNOOPER TROOPS II

1 Apple II Diskette, 48K.....$32.95

The Disappearing Dolphin.

SPEED READER II

APPLE II DISKETTE I J H C

2 Apple II Diskettes, 48K.....$69.95

"...an entertaining, self-paced program...(for) anyone who wants to increase their reading speed." **Interface Age, Oct 1982.** *Learning Software Computer Award 1982.*

Designed by reading specialists and tested on thousands of students. Challenging lessons and exercises designed to replace poor reading habits with good ones, sharpen perception, increase eye span, and correct sluggish eye movement. A complete reading development course which also measures your reading rate in words per minute with computerized reading tests; provides 35 interesting reading selections with quizzes to check comprehension; contains an easy-to-use editor for entering additional material; and determines reading level with a grade level analyzer. Can help double reading speed and increase comprehension. Teacher's guide.

Data Disks with additional reading selections. You must have Speed Reader II in order to use these disks.

SPEED READER II Data Disk A (Upper Elem.).....$19.95
SPEED READER II Data Disk B (Intermediate).....$19.95
SPEED READER II Data Disk C (High School).....$19.95
SPEED READER II Data Disk D (College/Adult).....$19.95

SPEEDREAD PLUS

APPLE II DISKETTE J H C A

2 Apple II Diskettes, 48K.....$64.95

Uses time-proven techniques to train you to instantly recognize words and phrases. Exercises your peripheral vision, improves your eye movement and timing, and generally works with you at your pace. Offers four modes for reading text: single phrase for developing phrase rcognition at high reading speeds; double phrase for developing eye movement and timing; random phrase for developing peripheral vision; and column phrase for training the eyes to read narrow text as found in newspapers and magazines with one-stop-per line. Allows selection of any combiantion of phrase widths and speeds with each of the four modes. Three classic texts provided for speed reading exercises: *Outcasts of Poker Flat* (Bret Harte); *Rip Van Winkle* (Irving); *Legend of Sleepy Hollow* (Irving). Other text can be entered as well as exam questions and answers to test comprehension. Teacher's guide. **NOTE:** Will not work on Apple IIc.

SPELL-A-VISION

APPLE II DISKETTE I J

8 Apple II Diskette, 48K.....$150.00

An independent study program for students who need to improve their spelling and vocabulary. There are 8 disks with 8,000 words. Each word has a sentence which defines or uses it. Teachers can enter their own spelling lists easily with built-in text editor in Volume 1. Optional sound. The records section displays student scores on each list. Each *Spell-A-Vision* volume has 1,000 words with sentences. Includes:

- Vol. 1: One Syllable Words
- Vol. 2: More One Syllable Words
- Vol. 3: Two Syllable Words
- Vol. 4: More Two Syllable Words
- Vol. 5: Sound Alikes
- Vol. 6: Three Syllable Words
- Vol. 7: Polysyllables
- Vol. 8: Challenging Words

SPELL DIVER

APPLE II DISKETTE I

1 Apple II Diskette, 48K.....$39.95

An entertaining and challenging way to improve spelling. Deep beneath the sea lie giant words covered by a strange seaweed called lettermoss. Players face ferocious sharks and pesky flipper-nippers as they try to remove the lettermoss and decipher the words. Guide.

S E P I J H C A LEVELS

- **S** - Special Needs
- **E** - Early Learning
- **P** - Primary Grades
- **I** - Intermediate Grades
- **J** - Junior High
- **H** - High School
- **C** - College
- **A** - Adult

SPELL IT

APPLE II DISKETTE ■■■IJ■■■

1 Apple II Diskette, 48K.....$49.95

"...injects excitement into the tedious task of memorizing lists of vocabulary words." **InCider, Feb 1985.**

Teaches spelling rules and provides an effective format for making spelling easy and fun. Includes four exciting learning activities: **Mastering Commonly Misspelled Words; Challenge Yourself** - a unique word scramble game; **Review the Spelling Rules** - as you spell the word, so you learn to spell other words more easily, too; **Captivating Arcade Game;** and easy-to-use editor so you can enter your own lists of words for all four Spell It activities. Teacher's guide.

SPELLING DEMONS, COMPUTER SPELL DOWN

APPLE II DISKETTE ■■PIJ■■■

1 Apple II Diskette, 48K.....$59.95

Provides drill and practice on the 100 most commonly misspelled words for each grade, 2 through 9, based on the *Educators Guide to Spelling Research and Practice* by Bradley M. Loomer. Deliberate repetition of the spelling words within the context of the sentences. Displays misspelled words at the end of each lesson for further study. Student chooses from three spelling versions of each word. (The distractors are the most common misspellings of the correct word.) Teacher's guide.

SPELLING GAMES

APPLE II DISKETTE ■■PIJH■■

SPELLAGRAPH

1 Apple II Diskette, 48K.....$39.95

"...fun for learners of all ages, and offers useful drill and practice with spelling." **Creative Computing, June 1984.**

The challenge of figuring out rebuses (word/picture puzzles) adds excitement to spelling practice. Comes with over 400 words from grade 2-8. Spelling activity is based on the self-corrected test. Each word comes with a context sentence. Create your own word list and sentences. Multiple skill levels. Teacher's notes.

SPELLAKAZAM

1 Apple II Diskette, 48K.....$29.95

Race the magician and release hidden animals. Colorful, lively animation and sound effects. Over 400 words. You can create your own word lists and sentences. Each word comes with a context sentence. Divided into grade levels 2-8. Multiple skill levels provide increasing challenge. Teacher's notes.

SPELLICOPTER

1 Apple II Diskette, 48K.....$39.95

Discover secret words with an action spelling game of 400 words in 40 lists. From grade 1-adult. Provides a context clue with each word. Students gain points for spelling words correctly and lose points for misspelling. You can create your own word lists and clues. Perfect for spelling lessons, or making quiz games from classroom content. Lively sound effects and animation. Teacher's notes.

SPELLING IN CONTEXT, Grades 1-8 SERIES

APPLE II DISKETTE ■■PIJ■■■

Complete Series (8 Sets; 8 Diskettes).....$250.00

Learning to spell a word in the context of a sentence helps to provide meaning to the word, and providing meaning for the word should increase the chance it will be remembered. In this program, each word is flashed on the screen for a brief time. Then the word disappears and a sentence is displayed. The sentence has a blank where the letters of the word will appear as the user types them. Immediate feedback. Misspelled words reviewed at end of regular lesson. Teacher's guide. A Micro School Program from Bertamax, Inc.

Each title contains one Apple II Diskette, 32K.

SPELLING IN CONTEXT, Grade 1.....$34.95
SPELLING IN CONTEXT, Grade 2.....$39.95
SPELLING IN CONTEXT, Grade 3.....$39.95
SPELLING IN CONTEXT, Grade 4.....$39.95
SPELLING IN CONTEXT, Grade 5.....$39.95
SPELLING IN CONTEXT, Grade 6.....$49.95
SPELLING IN CONTEXT, Grade 7.....$49.95
SPELLING IN CONTEXT, Grade 8.....$49.95

SPELLING LESSON AIDS (Words Package)

APPLE II DISKETTE ■■PIJ■■■

1 Apple II Diskette, 32K; Backup.....$50.00

Flash Spelling - Maintains a disk file of word lists. Words can be added. changed, or deleted from any of the files. Words are randomly selected and flashed on the screen. User then spells the word. 20 speeds. **Word Scramble** - Students unscrambles words randomly selected from word files. **Word Search** - Makes word puzzles from a list of words provided by the teacher. **Alphabetizing** - 3 levels of difficulty. **Word Adventure** - User tries to spell a word by choosing one letter at a time. Hero stands on a narrow ledge; ledge beomes more narrow if letter selected is not in the word; when user has spelled a word, he/she can swing across the pit safely.

SPELLING MACHINE

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K; Backup.....$49.95

Kid-tested, inexpensive, effective instructional software to improve spelling skills. Contains 700 words and sentences which encompass 85% of the words most frequently used by elementary school children. Supplements classroom instruction to improve spelling skills. After the student has achieved the required number of correct answers, he gets to select from a menu of six arcade-type games. Each game runs approximately one minute before returning to the drill and practice lessons. Extensive use of color graphics and sound helps make learning to spell fun. Insertion of user-selected words is easy with powerful text editing system. Record keeping system permits convenient progress reviews and listing of each child's misspelled words. Classroom management system included. Teacher's guide.

SPELLING MACHINE: CONTEXT AND RULES

APPLE II DISKETTE ■■■IJH■■

1 Apple II Diskette, 48K.....$39.00

Teaches more than thirty "rules", "tips", and shortcuts to better spelling. Each rule serves as a key unlocking the correct spelling of hundreds of words. Not just another spelling drill. Includes spelling in context and spelling by the rules. Teacher's guide.

SPELLING SERIES

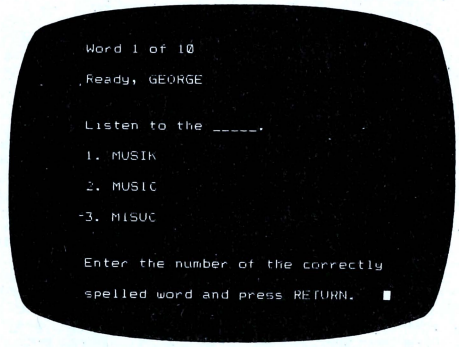
APPLE II DISKETTE ■■PIJ■■■

Complete Series (7 Sets; 7 Diskettes).....$279.65

Multi-grade level spelling program based on the test/teach/test format. A pre-test determines which words need to be learned. Learning activities follow the pre-test. A post-test checks spelling and comprehension. Includes 4,000 commonly used words. Teachers may also enter their own word lists. User's guide with each set.

SPELLING GRADE 2
SPELLING GRADE 3
SPELLING GRADE 4
SPELLING GRADE 5
SPELLING GRADE 6
SPELLING GRADE 7
SPELLING GRADE 8

(Each title, 1 Apple II Diskette, 48K.....$39.95)



SPELLING WITH MANAGEMENT

APPLE II DISKETTE ■■PI■■■■

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Provides drill in spelling, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Two hundred words are permanently stored on the disk, and teachers may enter up to five lists of 20 words each. Teachers choose the group of words to be used and the number of words to be presented in each run. Exercises include: Filling in missing letters of words; Selecting the correct spelling from 3 choices; Unscrambling the spelling words. Teacher's guide.

SPELLING WORKSHEET GENERATOR

APPLE II DISKETTE ■■PIJH■■

1 Apple II Diskette, 48K.....$49.95

Creates spelling worksheets from lists of up to 40 words or syllables that the teacher types into the computer (and can save on a disk). The computer then scrambles the words and, at the teacher's option, makes either cryptograms or lists of words with blanks substituted for correct letters. The computer creates the worksheet with one of three optional difficulty levels and prints the worksheet using easy-to-read, double-width print. Editing and correcting mistyped words is convenient and easy to do. Answer keys are automatically prepared and printed separately. Worksheets using fill-in-the-blank words can be generated with from 20% to 80% blanks as a means of determining difficulty levels. Printer required.

SPY MISSION: A READING ADVENTURE

APPLE II DISKETTE ■■■I■■■■

1 Apple II Diskette, 48K.....$39.95

An exciting reading supplement designed by teachers to succeed with even the most reluctant readers. More than 20,000 words create hundreds of new and different stories. Personalized stories -- children name the agents and choose their own adventures. Colorful high resolution graphics pictures and arcade games improve attention, interest and motivation.

STEPS TO COMPREHENSION SERIES

APPLE II DISKETTE ■■PIJ■■■

STEPS TO COMPREHENSION - GRADES 1-8

8 Apple II Diskettes, 48K; Manual.....$245.00

Delightful interactive program designed to improve comprehension skills. Built around 104 short stories written at eleven different levels from grade 1-8. Correct answers to questions produce graphics and animation. As the student achieves standard or above on the questions at the end of the story the picture "comes alive" with animation.

Stories and questions include: The traditional type, where the student reads a story and attempts to answer multiple choice questions about the story; The Cloze type, where the student must fill in the correct "missing word" as he reads the story. These techniques are used together to offer variety and challenge the students in different ways.

One of the outstanding features is remediation. After each incorrect answer the computer displays the part of the story with the correct answer. The student is not only shown what he did wrong but it is explained *why* it is the correct answer. It is like having a teacher who is intimately familiar with each of the selections sitting with the student as he answers the questions and showing him how the correct answer should have been found.

There is a classroom manager built into the system that will literally, make every assignment and keep track of each student's progress. Of course, the teacher may "override" the system at any time and make specific assignment as seen fit. 150 page manual.

STEPS TO COMPREHENSION - PRIMARY

4 Apple II Diskettes, 48K; Manual.....$159.50

Same as above except that it is written for primary level and contains only traditional type stories and questions -- no cloze type exercises.

STEPS TO SPELLING BREAKTHROUGH SERIES

APPLE II DISKETTE ■■PIJ■■■

A unique multi-level remedial spelling program. Both the words and spelling rules are learned through a wide variety of challenging exercises. The words were chosen from **The New Iowa Spelling Scales** and Arthur Gates' **Spelling Difficulties in 3,876 Words.** Teacher's guide.

STEPS TO SPELLING BREAKTHROUGH 1

2 Apple II Diskettes, 48K.....$96.00

This program concentrates on words misspelled by 50% of students in grades 2, 3, and 4.

STEPS TO SPELLING BREAKTHROUGH 2

2 Apple II Diskettes, 48K.....$96.00

Words misspelled by 50% of students in grades 5-6.

STEPS TO SPELLING BREAKTHROUGH 3

2 Apple II Diskettes, 48K.....$96.00

Difficult words, misspelled by 50% of students in grades 7-8.

STICKYBEAR READINESS

APPLE II DISKETTE ■EP■■■■■

"...the Golden books of computerdom." **Softalk, May 1983.**
"...combines the highest quality programming with sound educational theory..." **Creative Computing, Oct. 1983.** *Learning Computer Software Award, 1984.*

Bright, bouncy programs with lively eye-catching animation created by a popular children's illustrator. Hi-res graphics which move freely over color backgrounds...full-screen, full-color pictures.

STICKYBEAR ABC

1 Apple II Diskette, 48K; Book; Poster.....$39.95

Animated pictures respresenting each letter in the alphabet are shown. For ages 3 to 6. Instruction guide and stickers.

STICKYBEAR OPPOSITES

1 Apple II Diskette, 48K; Book; Poster.....$39.95

Big colorful animated pictures featuring Stickybear with unicycles, hot air balloons, bean plants, cars, and more, teach beginning learners about opposites. Up/down, full/empty, in front/behind, more. For ages 3-6. Instruction guide and stickers.

STICKYBEAR READING

1 Apple II Diskette, 48K; Book; Poster.....$39.95

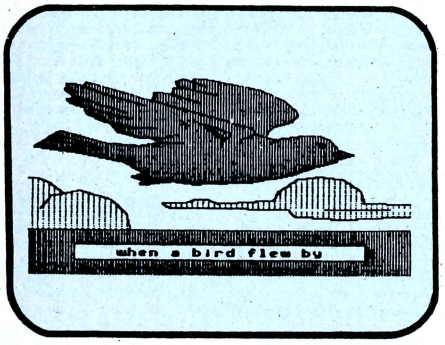
Kids build skills with this 3-activites-in-1 program as they **Match the Word, Find the Word,** or **Build a Sentence.** And *Stickybear Reading* has something totally delightful -- animation that turns the words and sentences printed on the screen into real life action! Enough choices for thousands of sentences and hours of fun. User's guide and stickers.

STORY MAKER

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$34.95

This program is unique -- a creative story construction kit. A zany character guides children through all the steps necessary to create their title, name their character, write sentences with the built-in word processor, and create their own original illustrations. The story and graphics are then computer integrated and can be saved on an independent disk, complete with title and author's name. No limit to compositions (poems, graphs, class assignments, graphic illustrations) which can be created. Guide.



STORY MIX SERIES

APPLE II DISKETTE [P]

For beginning readers. Students compose their story by selecting story parts from a menu of four choices. Each story part is a meaningful phrase. Stories are composed by choosing answers to such questions as who, what and why. As each choice is made a picture is displayed. A portion of the story is given below the picture. Each story part is a chunk of meaning which enhances understanding and retention. Each program in the series focuses on a different theme. Teacher's guide. Works with Echo II Speech Synthesizer. A Micro School Program from Bertamax, Inc.

STORY MIX 1
STORY MIX 2 (At the Zoo)

(Each title, 1 Apple II Diskette, 32K.....$24.95)

STORY TREE

APPLE II DISKETTE [I][J]

1 Apple II Diskette, 48K.....$39.95

"...offers a wide variety of ways to help get children hooked on writing, and reading..." **Personal Software, April 1984.**

Brings out the Mark Twain in every kid. Budding authors create their own mystery and adventure stories right on the computer screen, and a remarkable twist-a-plot feature lets them devise alternate choices for every turn of the plot. Teacher's guide.

STORYBOOKS OF THE FUTURE

APPLE II DISKETTE [E][P]

SPACE WASTE RACE

1 Apple II Diskette, 48K; Backup.....$55.00

"...All excellents." **InfoWorld.**

Humorous story about transporting waste to the moon entices students into five learning activities and games with imaginative themes. Students practice counting, number and letter identification, using the concepts of over/under, above/below, up/down, right/left. Teacher's guide.

SUBJECT-VERB AGREEMENT PLUS

APPLE II DISKETTE [I][J][H]

1 Apple II Diskette, 48K; Backup.....$49.95

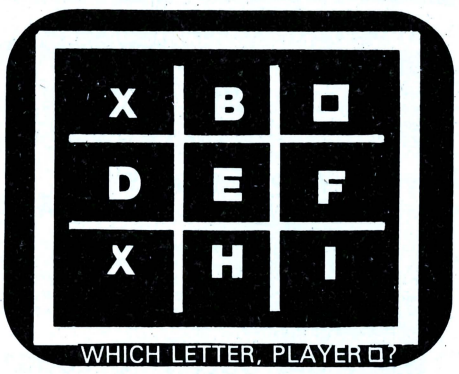
Covers all subject-verb agreement rules. Rules are carefully explained and illustrated. The student then applies the rule to specific problems. Error analysis and personal feedback are given after each program. Backup; teacher's guide.

SUPER SCOOP

APPLE II DISKETTE [H][C]

1 Apple II Diskette, 48K; Backup.....$65.00

Simulates the process of a news story as it unfolds, asking the students to work through a series of interviews just as they would if they were working reporters in a newsroom. Students select from more than 40 interviews from 20 different sources. A time-clock is running to simulate deadline pressure, so they are not allowed time to interview everyone. The objective is to write a 500-750 word story based upon their experience with the simulation. Just as in the real world of news, there is no one single, "correct" way to pursue the story in the simulation. The emphasis is on imaginative and skillful pursuit of news sources guided by the principles of good journalism and good writing. *Super Scoop* presents a provocative news problem that forces students to think carefully, take accurate notes, and reconstruct the news event for readers. Results are fully visible to the instructor and serve as a basis for discussion and active classroom debate. User's guide.



SUPER SPELLING

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K; Backup.....$124.95

Five programs use high-interest graphics, tutorials, game formats and timed drills to challenge good spellers and motivate poor ones. Teachers can program their own word lists, tailoring them to changing classroom needs. Programs provide unique and enjoyable tools for reinforcing essential spelling skills. Teacher's guide each title.

Scramble Letters - Students work individually or compete against one another as they attempt to unscramble teacher-selected words in a given amount of time. Computer gives tutorial help if word is not unscrambled in allotted time.

Super Scramble Spell - Individual work or competition as students try to unscramble words before the reach the bottom of the screen. First letters are underlined. No tutorial help.

Spell - Stores teacher-selected words and flashes individual words to students in timed displays. Students must then spell each word correctly. Display times can be varied.

Tic-Tac-Toe Spell - Generates spelling practice in a tic-tac-toe game format. Two students compete against each other as they match spelling skills for up to 100 teacher-selected words.

Rocket Spell - Students make an animated rocket appear and blast off as they guess the letters of "hidden words". Eight wrong guesses prevents the launch. Displays eliminated letters alongside the launching pad.

SYNONYM SEARCH

APPLE II DISKETTE [I][J][H]

1 Apple II Diskette, 48K; Backup.....$45.00

Exposes students to a large assortment of synonyms. Students recognize and match synonym pairs, and, in so doing, expand their vocabulary and ability to analyze words. **Game 1** uses fairly common words. **Game 2** uses more difficult words. **Game 3** is the "Expert" program including difficult, and obscure words and terms that will challenge even the most scholarly. Backup; teacher's guide.

SYNONYMS/ANTONYMS/ HOMOPHONES SERIES

APPLE II DISKETTE [P][I]

Complete Series (3 Sets; 3 Diskettes); Backups.....$90.00

Multi-level program. Tutorial and testing for these important concepts. Each level consists of a pre-test/content area/tutorial screens/and post test. Includes concentration game for synonyms, antonyms, and homophones. Controlled vocabulary. Immediate positive feed-back for all students responses. Written by teachers for teachers!

SYNONYMS/ANTONYMS/HOMOPHONES LEVEL 1
SYNONYMS/ANTONYMS/HOMOPHONES LEVEL 2
SYNONYMS/ANTONYMS/HOMOPHONES LEVEL 3

(Each title, 1 Apple II Diskette, 48K; Backup....$35.00)

TANK TACTICS SERIES

APPLE II DISKETTE [I]

Complete Series (7 Sets; 7 Diskettes).....$197.50

Students take on the dreaded "Super Tank" in a battle to end all battles. It's the "good guys" against the "bad guys" as students use their word skills to win the day. The Super Tank fires a word or word root and students must block the shot by choosing the correct affix (exact procedure depends on the specific skill being taught in that program). Ten correct responses spells victory for the student. Triumph is rewarded with closing graphics showing the "Super Tank" being wiped out. Defeat earns the student only words of encouragement for the next battle. Each program provides basic instruction in the word skill needed to play and allows the teacher to quickly review the student's performance. Teacher's guide each set.

TANK TACTICS: CONTRACTIONS
TANK TACTICS: SUFFIXES 1
TANK TACTICS: SUFFIXES 2
TANK TACTICS: PREFIXES
TANK TACTICS: BASE WORDS
TANK TACTICS: HOMONYMS
TANK TACTICS: PLURALS

(Each title, 1 Apple II Diskette, 48K.....$29.95)

THAT'S MY STORY/CREATIVE WRITING

APPLE II DISKETTE [P][I]

2 Apple II Diskettes, 48K.....$59.95

Student authors enjoy the opportunity to write their own stories based on story starters. Through a branching program, players build their story trees as they write. Program contains two double-sided discs. This guided writing activity insures peer cooperation. One or more players. Teachers's guide.

THINKING AND LEARNING

APPLE II DISKETTE [H]

1 Apple II Diskette, 48K.....$41.70

Included in Minnesota State Department of Education High Quality Courseware List, 1984.

Explores methods of thinking, evaluating, reading conclusions. By questions and answers, student learns about types of conclusions - objective, rational and intuitive. Especially useful for speech and debate classes. Helps student to better understand arguments, to recognize approaches, to reach truth thru logic. Tutorial presentation followed by question and answer session. Explanations given for wrong answers. Teacher's guide.

TIME CAPSULE SERIES

APPLE II DISKETTE [P][I]

Builds and reinforces all reading skills: main idea, context clues, author's purpose, details, sequence, structural analysis, inference, fact or opinion, cause and effect, and word meanings. Your students maneuver through 300 reading questions set in 11 time zones. You can add questions or adjust difficulty of play. Teacher's guide each set.

TIME CAPSULE: PRIMARY
TIME CAPSULE: INTERMEDIATE
TIME CAPSULE: UPPER INTERMEDIATE

(Each title, 1 Apple II diskette, 48K.....$49.95)

TUTORIAL COMPREHENSION

APPLE II DISKETTE [P][I]

Complete Series (5 Sets; 20 Diskettes).....$995.00

Learning Computer Software Award, **Jan 1984.**

Not even a teacher's aide can provide this much individualized comprehension instruction. Tutorials and practice lessons in five key comprehension skills; Main Idea, Details, Sequence, Inference, Critical Reading. A variety of interrelated concepts and instructional approaches are used to teach the five key comprehension skills. For example, to teach Main Idea, three sequential concepts are introduced: Categorizing, Topic Sentences, and Unstated Main Idea. All tutorial lessons are written at levels 2 and 3 so that vocabulary won't prevent skills mastery. Reading levels in practice lessons range from grades 2-6. Depending on how students score, they are directed automatically to either the next tutorial or to more practice. Emphasis on the five comprehension skills that are most critical to reading success. Each skill is arranged into sub-skills that are presented sequentially. A variety of instructional strategies are used to teach the same skill. Abundant practice lessons are linked to tutorial lessons. Controlled vocabulary. Comprehensive teacher's guide includes rationale and clear instructions for use. Pre-and post-tests are ideal for diagnosis.

MAIN IDEA
4 Apple II Diskettes, 48K.....$225.00
MAIN IDEA, Grades 2-3
MAIN IDEA, Grades 3-4
MAIN IDEA, Grades 5-6
(Each title, 2 Apple II Diskettes; Guide.....$79.95)

DETAILS
4 Apple II Diskettes, 48K.....$225.00
DETAILS, Grades 2-3
DETAILS, Grades 3-4
DETAILS, Grades 5-6
(Each title, 2 Apple II Diskettes; Guide.....$79.95)

SEQUENCE
4 Apple II Diskettes, 48K.....$225.00
SEQUENCE, Grades 2-3
SEQUENCE, Grades 3-4
SEQUENCE, Grades 5-6
(Each title, 2 Apple II Diskettes; Guide.....$79.95)

INFERENCE
4 Apple II Diskettes, 48K.....$225.00
INFERENCE, Grades 2-3
INFERENCE, Grades 3-4
INFERENCE, Grades 5-6
(Each title, 2 Apple II Diskettes; Guide.....$79.95)

CRITICAL READING
4 Apple II Diskettes, 48K.....$225.00
CRITICAL READING, Grades 2-3
CRITICAL READING, Grades 3-4
CRITICAL READING, Grades 5-6
(Each title, 2 Apple II Diskettes; Guide.....$79.95)

VOCABULARY DETECTIVE
APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$34.99
A vocabulary game in which valuable vocabulary words have been stolen. Students must question the suspects for clues and arrest the word thief. The game format promotes self-directed expansion of vocabulary skills and motivates children to succeed. Teachers may customize the program and insert their own vocabulary words. Appropriate for grades 3-12. Permits students to play with or without peer competition. Teacher's guide.

VOCABULARY IMPROVEMENT GAMES
APPLE II DISKETTE P I J

1 Apple II Diskette, 48K.....$34.95
User-friendly games which offer students a variety of ways to build their vocabulary. Words are chosen at random from lists of at least fifty words; clear instructions permit the teacher to modify the list of words. Players have the option of asking for hints when they need help. Correct answers are rewarded. Contents: Scramble; Ant-Syn-Hom. Teacher's guide.

VOCABULARY MACHINE
APPLE II DISKETTE P I J H

2 Apple II Diskettes, 48K.....$59.95
"...the Vocabulary Machine is excellent software...it does what microcomputer software should do..." **Closing the Gap.**
Contains more than 1000 words and sentences for grades 1 thru 12. Displays a high resolution graphics picture with each vocabulary word. Presents each word in a sentence to improve contextual analysis skills. Allows teachers to customize the program and insert their own words and pictures. Includes management system. Includes student record forms and comprehensive teacher's guide.

VOCABULARY SKILLS SERIES
APPLE II DISKETTE I J

These are well designed programs with excellent supplemental materials. Each set includes a manual and a tablet of reproducible worksheets and tests. Game paddles required. *NOTE: These programs will not work on the Apple IIc.*

VOCABULARY SKILLS: CONTEXT CLUES
1 Apple II Diskette, 48K.....$49.95
Program includes development of vocabulary through context, definition, contrast, educated guesses, and example.

VOCABULARY SKILLS: PREFIXES, SUFFIXES, ROOT WORDS
1 Apple II Diskette, 48K.....$49.95
"...a highly effective means of individualized teaching and testing of word-building skills." **Courseware Report Card, Sept 1982.**
Includes introductory concepts, prefix tutor, suffix tutor, root word tutor, and word building.

VOWEL GAMES
APPLE II DISKETTE S E P

3 Apple II Diskettes, 48K; Poster; Stickers.....$49.95
A 3 disk set designed to help students practice long and short vowel sounds. Includes posters and stickers. Excellent for K-2 and special education students. Teacher's guide.

WATCH YOUR LANGUAGE
APPLE II DISKETTE I J

1 Apple II Diskette, 32K; 6 programs.....$149.00
These programs present a brief tutorial and extensive drill on the various parts of speech: nouns, adjectives, verbs, adverbs and prepositions. Each program includes a definition of the part of speech, instruction on its use and recognition in a sentence. Then a sentence is presented and the student is asked to type a list of all the words in the sentence that are used as the part of speech being studied. Teacher's guide.

PERSON, PLACE OR THING
1 Apple II Diskette, 32K.....$30.00
Nouns.

TELL ME ABOUT IT
1 Apple II Diskette, 32K.....$30.00
Adjectives, different kinds of adjectives.

LIGHTS, CAMERA, ACTION
1 Apple II Diskette, 32K.....$30.00
Verbs, including "action" and "being" and auxiliary verbs.

WHERE, WHEN, HOW AND WHY
1 Apple II Diskette, 32K.....$30.00
Adverbs.

I HAVE A PREPOSITION FOR YOU
1 Apple II Diskette, 32K.....$30.00
Prepositions

WHAT PART DO YOU PLAY
1 Apple II Diskette, 32K.....$25.00
To be used after mastering previous sets. Drills students on nouns, adjectives, verbs, adverbs and prepositions in sentence context. A sentence is presented followed by one of the words in the sentence. Student must identify which part of speech that word is.

WEBSTER: THE WORD GAME
APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$29.95
Fast-paced, easy-to-play game. Players guess a word from which key letters have been deleted before the word disappears from sight. Helps students recognize word patterns and practice letter sequencing skills. Multiple levels. Guide.

WEEKLY SPELLING LIST
APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$49.00
Allows you to enter your students' weekly spelling lists for later use. Every word in each list is randomly scrambled to provide your students with unlimited practice. Many unit lists can be accessed by the student. Evaluation is provided for your student in both a percentage score and a listing of words improperly unscrambled.

WHICH ONE DOESN'T BELONG?
APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$29.95
Student picks out the one that is out of place in a group. Excellent graphics and built in word recognition feature. Teacher's guide.

WHO, WHAT, WHERE, WHEN, WHY
APPLE II DISKETTE P

1 Apple II Diskette, 48K.....$35.95
Teaches important reading comprehension skills. Gives a student the key and provides carefully sequenced practice to help him understand these easily confused words. Teacher can easily modify the lessons to include special vocabulary or create new lessons in a similar format. Teacher's guide.

WHOLE BRAIN SPELLING
APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$34.95
2000 of the most commonly misspelled words. Helps students develop internal visualization skills for improving spelling. Misspelled letters are highlighted. User's manual.

WORD ASSOCIATION GAMES
APPLE II DISKETTE P I J

THWART: A WORD BUILDING GAME
1 Apple II Diskette, 48K.....$39.95
A word association game that challenges students' wits and stretches their vocabulary. Simply pick a category and try to think of as many words as possible that fit the category. The words intersect like a crossword puzzle, until time and wits run out. Contains 12 word categories or allows teacher to design new games by entering their own words. Strengthens word association and recognition. Teacher's guide.

WORD WALK
1 Apple II Diskette, 48K.....$39.95
Want to be a word detective? Your ability to decipher clues can make you a winner in this challenging word game. The clues hint at a secret word. Guess this word and scoot across the gameboard. But you'll have to think quickly and beat your opponent to the draw. Four skill levels. Teachers may design new games by entering their own own words, making it adaptable to any curriculum. Teacher's guide.

WORD ATTACK
APPLE II DISKETTE I J H

2 Apple II Diskettes, 48K.....$49.95
"...well-designed, highly interactive vocabulary drill provides good reinforcement, encouraging students to learn word meanings, parts of speech, and spelling." **EPIE, May 1983.**
"Makes a game out of a vocabulary drill." **Software Reports, July 1983.**
A four-part vocabulary building system that makes learning new words interesting and fun. Contains 675 new words with meanings and sentences illustrating usage, as well as an easy-to-use, versatile editor which allows you to add your own word lists. Words are presented on 9 different levels for students age 8 - adult. College-bound students will find it an especially effective way to gain points on the SATs. Students select from a variety of exercises: word display; multiple-choice quiz; sentence completion; or word attack, a fast action arcade game. All are educationally well-designed and graphically appealing to maximize learning and minimize drudgery. Classroom tested. 44-page user's guide.
Data Disks with additional words. Must have WORD ATTACK to use.
WORD ATTACK DATA DISK, Grades 4-5.....$19.95
WORD ATTACK DATA DISK, Grades 6-7.....$19.95
WORD ATTACK DATA DISK, Grades 8-9.....$19.95
WORD ATTACK DATA DISK FOR THE SAT.....$19.95

WORD BLASTER
APPLE II DISKETTE P I

2 Apple II Diskettes, 48K.....$150.00
"...appealing reading practice..." **Booklist, March 1, 1984.**
"...proven to be appropriate for both remedial and gifted students." **Teaching and Computers, Oct 1983.**
Uses cloze techniques to develop reading vocabulary and sentence comprehension skills for students in grades 2-6. Contains 540 different sentences, divided into 7 levels of reading difficulty. The sentences for each grade level are grouped into 3 categories of difficulty: one year below grade level; grade level; and one year above grade level. Each lesson in the program consists of 12 sentences. Four of these sentences emphasize graphophenemic cues, four emphasize syntactic cues, and four emphasize emantic cues. There are 9 lessons per grade level. Develops comprehension and vocabulary skills in context. Uses modified cloze activities. Rewarding motivational format uses a "shooting gallery" approach to the selection of the correct missing word. If the appropriate word is "blasted", it moves to correct position in the sentence. Immediate correction and feedback. Teacher's guide.

WORD MAGIC
APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$49.95
Games that work like magic to help build reading and word structure skills. Young wizards help King Arthur and learn about initial consonants and consonant blends, prefixes, and suffixes. Cumulative record keeping and space for additional root words. Teacher's guide.

WORD MOUNT
APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$59.95
Enrichment activity designed to develop divergent thinking skills. Contains 30 lessons. Students generate words that rhyme with a given word; test phonic skills by substituting beginning consonants to form rhyming words; and test knowledge of variant spellings of the same sounds. May be used as individual or small group activity. Comprehensive teacher's manual. Worksheets illustrate lesson format. Record keeping forms included.

WORD PAIRS
APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$39.95
Designed to provide comprehensive instruction and practice on pairs of words frequently confused because they are similar in sound or meaning. The first part gives intensive instruction and relevant practice in definitions, models, and practice sentences and explanations. The second part offers more complex problems where students must apply what they learned from the earlier section. Concludes with an analysis of strengths and weaknesses. Teacher's guide.

WORD SCRAMBLER AND SUPER SPELLER
APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K.....$34.95
A fun way to study spelling. Includes practice drills for missed words, optional word unscrambling, and comprehensive scoring. Contains: Grades K-3, 4-8, 9-16 or higher. The program also allows you to input your own word files.

WORD SIMILARITIES SERIES
APPLE II DISKETTE J

Complete Series (2 Sets; 2 Diskettes).....$82.00
Many words are used incorrectly because they are similar to other words in spelling or sound. These programs review word similarities and help students become aware of the importance of correct word usage and spelling. Lively, colorful graphics promote word association and increase retention. Support manual and hand outs with each set.

WORD SIMILARITIES: LOOK-ALIKES
1 Apple II Diskette, 48K; Backup.....$41.00
Let's see, is it "affect" or "effect"? "dessert" or "desert"? If you or your students have difficulty distinguishing these and other confusing look-alike words, this program can help. Through a three-step tutorial, learners match the look-alike words with their definitions, use them in context, and see how their meanings can change or expand by the addition of prefixes and suffixes.

WORD SIMILARITIES: SOUND-ALIKES
1 Apple II Diskette, 48K; Backup.....$41.00
Some common-sounding words with their common and not-so-common spellings give three levels of skill to practice: definition, context, and word expansion. Lively graphic clues for each set of homophones help students make associations based on spelling and meaning. Students can expand their vocabulary by learning how word meanings change through the addition of prefixes and suffixes.

WORD SPINNER
APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$34.95
Reading becomes like a ride in an amusement park as children spin through the alphabet and learn to read. With brilliant colors and a whirling word spinner the building blocks of reading are made easy. Teacher's notes.

WORD STUDY PLUS

APPLE II DISKETTE P I J

Good programs with a "Plus" -- Teachers can easily modify or add lessons to suit the needs of their students. Complete record keeping. All except **Opposites** offer further teacher-set parameters such as number of tries allowed, repetition of missed questions, and branching for too easy or too difficult materials. Makes these programs truly unique and responsive to your classroom needs. Teacher's guide with each set.

ANTONYMS/SYNONYMS
1 Apple II Diskette, 48K.....$39.95
Provides individualized instruction for students who need practice in the identification and use of antonyms and synonyms. Great program for extending vocabulary. Begins with third level vocabulary and gradually increases in difficulty. 3rd to 8th level.

HOMONYMS PLUS
1 Apple II Diskette, 48K.....$39.95
Helps students become more familiar with homonyms. Student is given a definition of one or both of the words then required to use the word correctly in context. Lessons gradully increase in difficulty.

OPPOSITES
1 Apple II Diskette, 48K.....$29.95
An excellent program to improve a student's vocabulary. Lessons begin with second grade vocabulary and increase in difficulty until they include words selected for 10th level materials. The student sees a word and selects the opposite from a multiple choice format. Teacher can modify words to correspond to the curriculum or can create new lessons.

ROOTS/AFFIXES
1 Apple II Diskette, 48K.....$39.95
Ideal for providing individualized instruction and practice on the use of root word and affixes. Range from simple identification and correct use of Latin and Greek roots. **Also highly recommended for remedial secondary students and Adult Literacy.**

WORD WIZARDS: FOUR PROGRAMS

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Backup.....$44.00
Four educational word-study programs: **Cast a Spell** - presents spelling practice on a list of teacher-determined words. **Witch Word** - lets students unscramble words from the list, and **Wizard Magic** - is a guessing game in which students may use clues to guess the words on the list; also lets students enter a "secret" word and play against a friend. **Wizard Memory** - is a word game that challenges students to find identical words or sets of homonyms, antonyms, synonyms, or other word pairs of your choice. A teacher option enables you to make your own word lists. Teacher's guide.

WORDRIDER

APPLE II DISKETTE P I

1 Apple II Diskette, 64K.....$39.95
Users must overcome obstacles by combining nouns and adjectives to build fanciful animated vehicles – Climbing Egg-Catchers, Flying Water-Squirters, Bouncing Hole-Makers, and more -- and then maneuver those vehicles through some of the funniest perils yet found...from the geysers of Yellowyolk National Park to the streets of New Yolk City. Adventure and strategy game that builds vocabulary skills. User's guide.

WORDS ARE FUN, Set 1

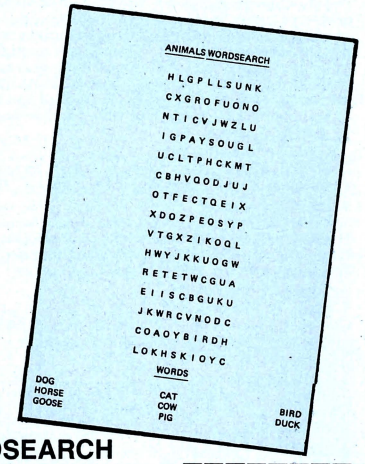
APPLE II DISKETTE P I

1 Apple II Diskette, 32K.....$129.00
"...builds vocabulary and reading skills with style, grace and charisma." **80 Microcomputing.**
Helps develop awareness of spelling patterns. Grades 2-4. **Wordmaster** - Phonograms exercises. Variety of exercises with each of 12 common word families. Student may select a particular phonogram with which to work or may choose to be given a random selection by the computer. **Spellcaster** - Practice with a spelling list of the teacher's choice. Actually 2 programs: *Spellbuilder* allows the teacher to build data files containing weekly spelling lists; *Spellcaster* reads those files and uses them in various exercises. Options include: List all the words; Flash words; Guess the missing letter; Patterns; Hangman. **Reword** - Rearrange one word into another. Uses 3-letter and 4-letter words. The word is presented on the screen; the student must change it to form a different word by rearranging its letters. **Snerd** - Creative writing. Students "construct a creature" by providing descriptive phrases in response to prompts on the screen. The phrases are inserted into a short "story" and students are encouraged to draw pictures of their creation. **Words in Words** - Recognition of spelling patterns. Students must identify which of four 4-letter words cannot be made from the letters in a longer word. Draws attention to the use of specific letters in the spelling of words. Teacher's guide.

WORDS! WORDS! WORDS!

APPLE II DISKETTE I J

1 Apple II Diskette, 32K; Backup.....$35.00
Student-centered drill and practice designed to improve spelling scores. Student is guided through the process of inputing word lists and can then practice the words and compare performance speed and accuracy from week to week. Lists can be save.



WORDSEARCH

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$29.95
A nice program to have in a library or media center where it is accessible to all the teachers. Helps a teacher create a wordfind. The teacher enters up to 22 words. The computer randomly generates the puzzle. The teacher can control the difficulty of the puzzle by choosing different options. The words are printed on the bottom of the puzzle. The computer will also print an answer key on request.

WORDSKILL

APPLE II DISKETTE H

3 Apple II Diskettes, 48K.....$69.95
Vocabulary-building game especially written to take advantage of the computer's unique abilities by Peter Funk, author of the popular *Reader's Digest* feature, "It Pays to Enrich Your Word Power". Designed for high school and community college students, the *Wordskill* program teaches 300 key words and an additional 600 words. The game provides students with correct definitions, examples of proper usage, synonyms and antonyms, and information on parts of the word or its derivation. Students are introduced to a word; they become familiar with it; and they remember it. Imaginative sound and animated graphics keep vocabulary-building fun. Simple to use. Particularly useful for those studying to take the PSAT, SAT or GRED exams and for ESL students at all levels. Includes quiz. Teacher's manual.

WRITING A CHARACTER SKETCH

APPLE II DISKETTE H

1 Apple II Diskette, 48K; Backup.....$43.00
MECC creative writing courseware. Open-ended questioning emphasizes the ideas the student contributes. The framework of questioning is highly structured. Guides students by example and comprehension questions. Students demonstrate their understanding by typing in their own ideas about a fictional or historical character or about someone they know. For individuals or small groups. Students complete a computer session with a printed copy of their pre-writing ideas or fill in a handout sheet. Guides students in writing their rough draft. Teacher's guide.

WRITING A NARRATIVE

APPLE II DISKETTE J

1 Apple II Diskette, 48K; Backup.....$43.00
MECC creative writing courseware. **Idea Storming One-Two-Three** - students learn a story-starting technique while creating the framework for a narrative. **Catch the Moments** - focuses on the key elements of narrative structure by tracing the development of an event from the student's own experience. **Point of View** - encourages students to choose the voice of the narrator. For individuals or small groups. Handout sheet guides students in writing their rough draft. Teacher's guide.

WRITING ASSISTANCE LESSONS (Wordy)

APPLE II DISKETTE H C

3 Apple II Diskettes, 48K.....$130.00
Included in Minnesota State Department of Education High Quality Courseware List, 1984.
Imaginative graphics. Teaches the do's and don'ts of composition through examples and quizzes. Topics covered are circumlocution expressions, redundancy, "it is" constructions, weakening intensifiers, pretentious diction, elaborate constructions and unnecessary "is" and "are" forms.

WRITING SKILLS SERIES

APPLE II DISKETTE H

A practical approach to improving writing skills. Focuses on correcting the most common writing mistakes through editing. Features a built-in text editor which allows a person to correct written passages on the screen. The student edits several passages containing grammatical errors in the areas listed. The pretest measures the student's knowledge, and identifies the areas for study. Lessons on specific problem areas thus diagnosed teach by presenting information, asking questions, providing practice and testing skills. Rather than requiring the student to undertake a comprehensive course in grammar, Writing Skills concentrates only on diagnosed areas of weakness. Ideal tool to help an adult or teenager improve writing skills through self-paced instruction. A grade book and class manager are included. Teacher's guide with each set.

WRITING SKILLS 1
2 Apple II Diskettes, 48K.....$39.95
Possessives and contractions; Noun plurals and possessives; Subject and verb agreement.

WRITING SKILLS 2
2 Apple II Diskettes, 48K.....$39.95
Pronoun/antecedent agreement; Commas; Subject/verb agreement.

WRITING SKILLS 3
2 Apple II Diskettes, 48K.....$39.95
Quotation practice; Pronoun cases; Subject/verb agreement.

WRITING SKILLS 4
2 Apple II Diskettes, 48K.....$39.95
Pronoun/antecedent agreement; Troublesome modifiers; Subject/verb agreement.

WRITING SKILLS 5
2 Apple II Diskettes, 48K.....$39.95
Pronoun/antecedent agreement; Problems of case; Consistency.

ZAP ZEUS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.95
A game of Greek mythology with tutorial information and questions. Designed to supplement classroom activities and reading in Greek mythology.

MATHEMATICS

ADDITION LOGICIAN

APPLE II DISKETTE P

1 Apple II Diskette, 48K; Backup.....$43.00
Presents problems and motivating games which focus on whole number addition concepts involving regrouping. Problems are carefully sequenced according to difficulty, and records are kept of individual student performance. Programs: **The Fence Game, Zebug Nim, Three in a Row, Repeat After Me,** and **Race Time.** Teacher's guide.

ADDITION MAGICIAN

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$34.95
"...excellent independent activity to supplement the regular math program...adds a new dimension to math drill and practice programs." **Teaching and Computers, Feb 1985.**
An absent-minded magician makes a game out of learning addition. Magical walls and secret prizes encourage flexible thinking about adding. Children become addition magicians! For ages 6-10. Teacher's notes.

ADVANCED MATHEMATICS

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Backup.....$49.00
Powerful tools to enable higher education mathematics students to investigate complex, realistic problems. Calculus students can graph functions in Cartesian or polar coordinates and parametric equations. Numerical approximations to definite integrals and roots of equations can be quickly and accurately calculated. Students in finite math and linear algebra can manipulate matrices to solve systems of equations and can solve linear programming problems. Science and social science students can determine a least squares approximation from a set of experimental data. Teacher's guide contains student instruction sheets, worked examples, and application exercises.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

ALGEBRA DRILL AND PRACTICE SERIES

APPLE II DISKETTE H C

Provides drill, practice and help for students of algebra with little direct instructor involvement. Once the student knows how to manage the technical details of using the computer, the programs provide all the guidance necessary. The programs provide virtually unlimited example problems and their detailed, step-by-step solutions. The two sets cover most of the topics included in an elementary algebra course, as well as some pre-algebra topics that beginning students have difficulty mastering. Teacher's guide with each set.

ALGEBRA DRILL AND PRACTICE 1
2 Apple II Diskettes, 48K.....$125.00
Includes algebraic signs, operations with numeric and algebraic fractions, percents, equations of lines, simplification of algebraic expressions, and word problems for elementary, intermediate, college and remedial algebra. Nine drills are included.

ALGEBRA DRILL AND PRACTICE 2
2 Apple II Diskettes, 48K.....$125.00
Covers pre-algebra and algebra topics for elementary, intermediate, college, and remedial algebra. Topics covered include decimal arithmetic; absolute numbers; solving equations with inequalities involving absolute values; factoring linear and quadratic expressions, both binomials and trinomials; solving linear algebraic equations; finding roots of quadratic equations, x-intercepts of parabolic graphs, and the vertex of a parabolic graph; and solving linear inequalities. Includes word problems.

ALGEBRA: BASIC SKILLS

APPLE II DISKETTE J H

Complete Series (7 Sets, 7 Diskettes); Backups.....$185.00
"requires students to think independently as they interact with the tutorial program..." **Booklist, May 1, 1984.**
Excellent programs that go beyond drill and practice. Randomly generated exercises for each concept. The student uses the screen as a worksheet, solving the equation step-by-step on the screen. After each step the equation is updated. Student moves at his or her own pace. All errors are immediately flagged and explained. Complete error analysis after each set of problems. Extremely well designed and implemented. Teacher's guides with each set.

EQUATIONS I
1 Apple II Diskette, 48K; Backup.....$29.95
"This is an excellent program...I recommend the purchase of this product." **School Microwave Review, Summer 1982.** *"...easily used by people with limited computer knowledge."* **Minn. Dept. of Education High Quality Courseware List.**
Randomly generated equations in the form AX+B=C, where A, B and C are integers. All solutions are integer values. All errors immediately flagged and explained.

EQUATIONS II
1 Apple II Diskette, 48K; Backup.....$29.95
Generates linear equations in the form of AX+B=CX+D where A, B, C, and D are integers. Helpful feedback throughout program.

SOLVING QUADRATIC EQUATIONS
1 Apple II Diskette, 48K; Backup.....$29.95
"...simple and clear and will provide good reinforcement for students who need to develop skills in factoring quadratic equations. This is a program that does what it sets out to do." **Media Review, Feb 1983.**
Generated quadratic equations in the form AX2+BX+C=0 that are solvable by factoring. Detailed help given as needed.

BINOMIAL MULTIPLICATION
1 Apple II Diskette, 48K; Backup.....$29.95
"...excellent method of drill and practice..." **Minn. Dept. of Education High Quality Courseware List.**
Provides practice in multiplying two binomials in the form (ax+b)(cx=d) where a, b, c, and d are integers. Tutorial help available as needed.

FACTORING ALGEBRAIC EXPRESSIONS
1 Apple II Diskette, 48K; Backup.....$29.95
"...format of this disk is one of the best I have seen." **Minn. Dept. of Education High Quality Courseware List.**
Algebraic linear and quadratic expressions that are factorable. Allows student to experiment. Help immediately available as needed.

SIMULTANEOUS LINEAR EQUATIONS
1 Apple II Diskette, 48K; Backup.....$29.95
"...impossible not to complete the solution, because the program provides help at every step." **Mathematics Teacher, April 1984.**
Generates random linear equations that are solvable by addition or subtraction. After completion of the equation, the program shows a graphic representation of the solution allowing student to see the connection between the algebraic and graphic solution.

GRAPHING LINEAR FUNCTIONS
1 Apple II Diskette, 48K; Backup.....$29.95
"...an excellent piece of educational software. with its low price, it is highly recommended for every secondary mathematics classroom..." **Mathematics Teacher, May 1984.**
Practice in graphing linear functions in the form AX+BY=C (or some variation of that form). Graphics enhance student understanding.

ALGEBRA I SERIES

APPLE II DISKETTE J H

"This program should stand as an example for educational software writers...simulates the techniques used by the teacher in the classroom." **Courseware Report Card, Dec 1982.**
In each unit of Algebra I, students may select one or more distinct "Learning Styles". A student may work sample problems, read a discussion of a concept, watch as an equation is solved step-by-step, or study the rules which govern an operation. Algebra I features color high-resolution graphics display, including upper/lower case text for maximum clarity. Flow-charted "information maps" mark the learner's progress by designating concepts learned, those still to be learned, and those that were troublesome.

ALGEBRA I, Part 1
1 Apple II Diskette, 48K.....$39.95
Contents: Definitions, Number Line Operations, Sets, Evaluating Expressions, Rules for Equation Reduction.

ALGEBRA I, Part 2
1 Apple II Diskette, 48K.....$39.95
Contents: Addition of Real Numbers, Multiplication of Real Numbers, Solving Equation and Problems, Solving Inequalities.

ALGEBRA I, Part 3
1 Apple II Diskette, 48K.....$39.95
Contents: Monomials, Polynomials, Simple Factoring, Factoring and Binomials, Quadratic Trinomials.

ALGEBRA I, Part 4
1 Apple II Diskette, 48K.....$39.95
Contents: Introduction to Graphing, Linear Equations, Variation, Solving Systems of Linear Equations, Inequalities.

ALGEBRA I, Part 5 and 6
1 Apple II Diskette, 48K.....$49.95
Contents: Irrational Numbers, Radical Expressions, Finding Square Roots, Quadratic Equations, Quadratic Inequalities.

ALGEBRA WORD PROBLEMS SERIES

APPLE II DISKETTE J H

ALGEBRA WORD PROBLEMS 1: MOTION
1 Apple II Diskette, 48K; Backup.....$39.95
Highly interactive program designed to give students practice in solving randomly generated word problems involving the motion of two vehicles. After putting the variables and constants in a box-grid, the student must then derive the correct equation and solve it. Student proceeds in a step-by-step manner. All errors are immediatley flagged and explained. Teacher's guide.

ALGEBRA WORD PROBLEMS 2: AREA, PERIMETER, AND LEVER
1 Apple II Diskette, 48K; Backup.....$39.95
Students having trouble translating word problems to algebraic equations will find this program helpful. Word problems involving area, perimeter, and lever problems are randomly generated. After putting the variable and constants in a box-grid or on a picture diagram of the problem (using the screen as a worksheet), the student must then derive the correct equation and solve it. Student proceeds in a step-by-step manner. All errors are immediatley flagged and explained. Teacher's guide.

ALGEBRA WORD PROBLEMS 3: MIXTURE, COIN, AND INVESTMENT
1 Apple II Diskette, 48K; Backup.....$39.95
Highly interactive program gives the student practice in solving randomly generated mixture, coin, and investment word problems. After putting the variables and constants in a box-grid, the student must then derive the correct equation and solve it. Student proceeds in a step-by-step manner. All errors are immediatley flagged and explained. Teacher's guide.

APPLIED MATH

(Survival Math)

APPLE II DISKETTE J

1 Apple II Diskette, 32K; Backup.....$55.00
Recommended as Exemplary Science and Mathematics Software. **Classroom Computer News, March 1983.** *"...presents a wide variety of challenging problems in realistic contexts."* **Courseware Report Card, 1983.** *Included in* **Minnesota State Department of Education High Quality Courseware List.**
Simulations in applying math skills. Each simulation requires the use of math as a basis for making sound judgments. **Smart Shopper Marathon** - Student tries to figure the best shopping buys, using such aids as unit prices and percent discounts. **Hot Dog Stand** - Students run a hot dog stand at the school's football games. They purchase food and set prices on the basis of anticipated crowd size and weather conditions. **Travel Agent Contest** - Student plans a 7-day, 6-night trip without exceeding a prescribed spending limit. **Foremans's Assistant** - Student helps plan a playroom and buys materials for building. Covers such concepts as area, perimeter and units of measure. Teacher's guide.

ALGEBRA TUTORIALS

APPLE II DISKETTE H

Complete step-by-step tutorials with unusual and outstanding graphic capabilities. Offers complete instruction in the essential areas of Algebra. Text-independent, menu-driven and fully documented.

ELECTRONIC BLACKBOARD
4 Apple II Diskettes, 48K.....$165.00
This complete grouping, consisting of *Algebraic Electronic Blackboard, Trigonometry Electronic Blackboard,* and the *Function Plotter,* adds a new dimension to pre-calculus algebra. Besides offering full tutorials, it is designed to animate concepts. You can rapidly sketch and illustrate examples, reinforcing concepts and helping students visualize and learn. Now your students can see graphs of functions and equations as they are constructed by the computer, and they can interact and exchange information with the computer rather than simply observing the screen. Best of all, it enables you to explore the "What if..." type questions quicker and more interestingly than with a blackboard presentation. Teacher's guide with each set.

ALGEBRA ELECTRONIC BLACKBOARD
2 Apple II Diskettes, 48K; (5 programs).....$95.00
"...features a creative use of graphics as an instructional tool and a unique triple-mode instructional model. Graded A." **Courseware Review, 1983.**
- Cartesian Coordinates
- Lines and Linear Functions
- Quadratics and Polynomials
- Conic Sections
- Logarithms, Exponentials and Inequalities

TRIGONOMETRY ELECTRONIC BLACKBOARD
2 Apple II Diskettes, 48K.....$50.00
- Wrapping Function
- Special Angles
- Graphing Trigonometric Functions
- Graphing Sines and Cosines

FUNCTION PLOTTER
1 Apple II Diskette, 48K.....$50.00
This program teaches students how to enter and graph almost any function they wish and allows them to translate, stretch or shrink it. A mathematical game "Carroll Critters" is also included where students construct the graph of the function which will intercept or "Zap" the most critters.

PRECALCULUS ALGEBRA
6 Apple II Diskettes, 48K.....$275.00
Works like a professional tutor. Student is encouraged to actually solve problems instead of just reading solutions. Interact format guides student along entire process. Positive reinforcement of right answers receives diagnostic support with helpful hints and work-along steps. Easy to explain and use. Divided into 6 diskettes to allow teacher to select topics, arrange curriculum and tailor tutorial sessions to special needs. Once a diskette is read onto one computer it can be removed and loaded onto another computer. In this way, many students can work on the same algebra topic simultaneously. User's guide with each title.
- Fundamental Concepts of Algebra
- Equations/Inequalities
- Polynomial Functions, Rational Functions, and Conic Sections
- Exponential and Logarithmic Functions
- Systems of Equations and Inequalities

(Each title, 1 Apple II Diskette, 48K.....$49.95)

ALGEBRA ARCADE
1 Apple II Diskette, 48K.....$49.95
"...designed to help you have fun while learning or practicing algebra." **InfoWorld.**
An exciting game for learning and practicing Algebra at many different levels of difficulty. You create graphs that zap Algebroids thereby increasing your score. A complete rules and instruction booklet tells you how to get started and offers tips on strategy and winning equations. Students like this one!

ARBPLOT

APPLE II DISKETTE H C

2 Apple II Diskettes, 48K.....$125.00
"...used to provide students with discovery learning or tutorial and practice in selected topics in calculus and analytic geometry." **Electronic Learning, Sept 1983.**
Includes function plotting, limits and derivatives, integration, sequences and series, roots of equations, differential equations for calculus and analytic geometry. With this program the calculus instructor can demonstrate plotting curves from functions defined in several ways: in explicit or parametric form, in rectangular or polar coordinates, bounded or unbounded, continuous or discontinuous. The instructor can also illustrate a variety of specific concepts in calculus: limits and derivatives, integration, sequences and series, and methods of finding roots. In addition, this program helps the instructor create and run "slide shows"for presenting preplanned sequences of graphic illustrations. 190-page teacher's guide.

ARCADEMIC SKILL BUILDERS IN MATH

APPLE II DISKETTE ■■[P][I][J]■■■

"This package of math games turns math drill into sheer pleasure for children." **InCider, May 1983.**

The fast action and colorful graphics of an arcade game format will motivate students of all ages to learn fundamental math skills. Provides practice and drill in the four basic math operations and combinations of operations. The program range of numbers can be changed to practice basic facts with the numbers 0-3, 0-6, 0-9. Each game has 9 different speeds; runs from 1-5 minutes; and can be controlled with either paddles or keyboard.

***Each $34.00 set includes 1 Apple II Diskette and a user's guide.**
****Each $44.00 set includes 1 Apple II Diskette with instruction sheet; 122 blackline masters; Deck of full-color flashcards; 16-page teacher's guide.**

ALIEN ADDITION.....*$34.00/**$44.00
MINUS MISSION.....*$34.00/**$44.00
METEOR MULTIPLICATION.....*$34.00/**$44.00
DEMOLITION DIVISION.....*$34.00/**$44.00
ALLIGATOR MIX.....*$34.00/**$44.00
Addition and Subtraction.
DRAGON MIX.....*$34.00/**$44.00
Multiplication and Division.

ARITHMETIC CLASSROOM SERIES

APPLE II DISKETTE ■■■[I][J]■■■

Complete Series (9 Sets), Apple II Diskette, 48K...$429.55

"...based on a sound mathematical sequence found in many math textbooks...gently moves through a logical and enjoyable sequence toward eventual mastery." **Educational Computer Magazine, May/June 1983.** *Recommended.* **School Library Journal, Aug 1982.** *Included in* **Minnesota State Department of Education High Quality Courseware List.**

One of the best, most competent elementary classroom mathematics learning programs available. Developed by experienced highly competent educators, tutorially based. Every instructional unit is objective based -- making it easy to identify the specific skills on which students are working. Lessons begin with examples that include pictorial representation and explanation of the problem type. Practical problems follow each tutorial episode. Problems are randomly generated or drawn from large item banks, allowing students to repeat lessons without seeing a repetition of problems. Throughout the practice exercises, whenever an error is made, instructional hints are provided based upon the type of error made and the tutorial approach employed earlier. Students receive strong positive reinforcement for correct responses. The Games package is available to provide additional practice. Consists of a total of eight self-contained but highly integrated learning packages – one for each of the following, plus a Games package. Teacher's guide.

Demonstration diskette available

Each learning program contains: 1 Apple II Diskette, 48K; Practice Exercises, Achievement Record Forms.

Arithmetic Classroom: Addition.....$49.95
Arithmetic Classroom: Subtraction.....$49.95
Arithmetic Classroom: Multiplication.....$49.95
Arithmetic Classroom: Division.....$49.95
Arithmetic Classroom: Fractions I.....$49.95
Basic Concepts
Arithmetic Classroom: Fractions II.....$49.95
Addition and Subtraction
Arithmetic Classroom: Fractions III.....$49.95
Multiplication and Division
Arithmetic Classroom: Decimals.....$49.95
Arithmetic Classroom: Games.....$29.95

ELEMENTARY MATH LEARNING SYSTEM

Complete Series (2 Sets, 12 Diskettes).....$990.00
Exactly the same material as *ARITHMETIC CLASSROOM SERIES*, but it contains a complete built-in management system including **Embedded Mastery Tests, Diagnostic and Prescriptive Functions, Achievement Tracking, and Report Printing.** Excellent for schools seeking a comprehensive math program with built-in record keeping. More information available on request.

ELEMENTARY MATH LEARNING SYSTEM, Set 1
6 Apple II Diskettes, 48K; Documentation.....$495.00
Whole Number Arithmetic: Addition, Subtraction, Multiplication, Division, Games, and Learning Management System.

ELEMENTARY MATH LEARNING SYSTEM, Set 2
6 Apple II diskettes, 48K; Documentation.....$495.00
Fraction/Decimal Arithmetic: Meaning/Equivalence/Order of Fractions, Addition and Subtraction of Fractions, Multiplication and Division of Fractions, Decimals, Games, Learning Management System.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

ARITH-MAGIC SERIES

APPLE II DISKETTE ■■[P][I][J]■■■

ARITH-MAGIC I
1 Apple II Diskette, 48K.....$35.00
"All are motivational and different from most usual drills." **Creative Computing, April 1982.**

Introduce youngsters to the magical world of mathematics. For grades 2-6. These game-like programs let kids have fun with basic mathematics and help them develop problem-solving skills. Games includes: Diffy, Tripuz, and Magic Squares. Problems gradually become more difficult and a tutorial mode is provided to make sure that the student understands the theory behind the solutions. Excellent for accelerated learners. Teacher's guide. A Quality Educational Design program.

ARITH-MAGIC II
1 Apple II Diskette, 48K.....$35.00
Consists of three games, two help programs and two explorations of the mathematical questions which arise in the games. Game titles are: Squ/area Game, Rectangle Game and Per/area Game. Like Arith-Magic I, the diskette is self-contained and does not require any outside knowledge except familiarity with addition and multiplication. For grades 3 and up. Teacher's guide. A Quality Educational Design program.

BALANCE

APPLE II DISKETTE ■■■■[J][H]■■

1 Apple II Diskette, 48K; Backup.....$49.00
Helps students visualize and better understand the process of solving equations. Linear equations are graphically displayed on a "balance beam". If the quantites on one side are equal to those on the other, the equation is balanced, and the beam remains horizontal. When quantities are unequal, however, the beam will tip in one direction or the other. A separate option allows the students to enter values of "X" continuously while observing the effects of the balance beam. Backup; teacher's guide.

BASIC MATH FACTS DRILL

APPLE II DISKETTE ■■[P][I]■■■■

1 Apple II Diskette, 48K.....$59.95
"...highly motivating and exciting..." **Computing Teacher, Feb 1983.**

Provides drill and practice on all basic addition, subtraction, multiplication and division facts. Easy-to-understand, on-screen directions. randomly selected exercises. Immediate correction and feedback. Game activity at the end of each lesson. Scoring appears on-screen at the end of each lesson. Teacher's guide.

BASIC MATH "FLASH" FACTS

APPLE II DISKETTE ■■[P][I]■■■■

1 Apple II Diskette, 48K.....$59.95
Drill and practice in basic addition, subtraction, multiplication, and division facts against time. The appeal of flash card techniques *plus* the excitement of timed responses and a running display of results. Individualized practice, with each student working at an appropriate level and pace. Teacher can control lesson content by selecting specific basic facts or combinations of facts. Randomly generated exercises. Teacher's guide.

BASIC MATH MASTERY

APPLE II DISKETTE ■■■[I][J]■■■

These are very well designed programs for practicing and mastering basic math operations. All problems are generated randomly. Different problems are presented each time a program is run. The computer screen simulates the work being done on paper, so no pencil and paper is needed. A cursor points to each position as an entry is needed. Student can follow the procedure easily. When an error is made, it is immediately flagged. Students may then enter another number or, when helpful, an explanation is shown on the screen. This way the student always knows exactly where s/he is and exactly where the error occurred. If a second error is made on a problem the answer is shown, and the procedure continues. Includes management system for student record keeping. Teacher's guide.

Addition With Carry - Problems may be chosen with 1-9 addends from 1-9 columns wide.

Subtraction Practice - Student selects problems with or without "borrowing".

1-2-3 Digit Multiplication - Student multiplies 3 digit number by a 1, 2, or 3 digit number.

Long Division - Students choose either a 1, 2, or 3 digit divisor.
(Each title, 1 Apple II Diskette, 48K; Backup....$24.95)

BINARY MATH

APPLE II DISKETTE ■■■■[J][H]■■

2 Apple II Diskettes, 48K; Diagnostic Tests.....$49.95
Gives your students the introduction they need to the binary number system. Includes a brief explanation of other number bases. Practice is provided in converting from the base 10 system to the binary system. Lessons are carefully sequenced in difficulty. Explanations of incorrect answers are given for difficulty items. Lesson content may be modified. Good program for a Computer Literacy class. Teacher's guide.

BEGINNING ALGEBRA

APPLE II DISKETTE ■■■■[J][H]■■

3 Apple II Diskettes, 48K; 4 Audio Cassettes; Worksheets.....$74.95
A course that teaches first semester algebra. More than just a game, more than drill and practice. *Begining Algebra* comes with voice cassettes, program disks, a User's Manual and worksheets. The student listens to the voice cassette (played on an ordinary cassette player), while watching the computer display. After a brief explanation, the student is asked to solve a series of problems. The programs are designed with positive reinforcement in mind. If the student answers correctly, he or she goes on. If not, the student is given a hint and asked to try again. After each lesson, the student completes practice exercises. Fifteen lessons plus reinforcing exercises give the student a thorough foundation in the basics of algebra. Further reinforcement and unlimited practice of learned skills is produced by the "Equation Machine" -- a program that generates an infinite number of algebraic equations for the student to solve, and takes the student step by step through the process of solving them.

BUILDING BASIC MATH SKILLS SYSTEM

APPLE II DISKETTE ■■■[I][J]■■■

Complete Series (4 Sets; 10 Diskettes).....$289.80
Individualizes programs. Enhance students' basic math skills by taking the boredom out of drills. Go directly to main program or use placement, starter and post tests. Menu driven. Variable screens. Provides help messages when needed. Teacher's guide with each set.

NUMBER BASICS PRIMER
2 Apple II Diskettes, 48K.....$49.95
Addition, subtraction, multiplication and division.

NUMBER THEORY BASICS
6 Apple II Diskettes, 48K.....$169.95
Numeration, Number Patterns, Expanded Notation, Place Value and Operations, Number Sentences, Rounding and Estimating.

FRACTIONS PRIMER
1 Apple II Diskette, 48K.....$34.95

DECIMALS PRIMER
1 Apple II Diskette, 48K.....$34.95

BUMBLE PLOT®

APPLE II DISKETTE ■■[P][I]■■■■

1 Apple II Diskette, 48K.....$39.95
"Highly recommended." **Microsift Reviews, May 1983.**

Five programs building on the graphing skills, using the Bumble character. In Bumble Plot children use positive and negative numbers to name points in four quadrant grids. Games are arranged from easy to hard. Color graphics; music and sound effects that can be turned on and off. Teacher's guide.

Bumble Plot is a trademark of The Learning Company.

CHALLENGE MATH

APPLE II DISKETTE ■■■[I][J]■■■

1 Apple II Diskette, 48K; Backup.....$55.00
"...appealing and involving games...Recommended." **Booklist, Sept 1, 1983.** *"...year's most worthy educational program", Computer Software Roundup,* **Instructor, Nov/Dec 1983.**

Lively games with color graphics and sound help your students stretch their mathematical skills. Programs cover basic operations, decimals and fractions. A teacher option lets the instructor modify the levels of difficulty, making the programs ideal for both remedial students and those who are on grade level. Teacher's guide gives detailed instruction and provides suggestions for classroom use.

CLOCK AND CALENDAR

APPLE II DISKETTE ■■[P][I]■■■■

CLOCK
1 Apple II Diskette, 48K.....$39.95
"This is a carefully prepared, well-thought-out program that should be a welcome tool for anyone teaching time-telling skills." **Courseware Report Card.**

Excellent program uses interactive graphics to help students learn to convert between digital time and "clock" time. Allows students to manipulate the hands of an on-screen clock. 3 multi-level lessons and tutorial. Includes: hour, half-hour, 5 minutes, 1 minute. Teacher's guide.

USING A CALENDAR
1 Apple II Diskette, 48K.....$39.95
Included in **Minnesota State Department of Education High Quality Courseware List.**

A great way to teach a child how to read and interpret a calendar. You will never find enough practice in this skill in your basal text! Each lesson presents a picture of a calendar. Information and questions are presented below the picture. The child is required to make simple day/date relationships, find holidays and use the calendar to solve simple word problems. Three levels of difficulty. The teacher may modify any of the lessons or use the "create" capability to write new lessons. Allows a teacher to draw a calendar on the screen, highlight any date, and ask any number of questions. Teacher's guide.

BASIC FUNDAMENTALS I

ARITHMETIC FUNDAMENTALS I

APPLE II DISKETTE *Grade Level 2-5*

Complete Series (4 Sets, 29 Diskettes).....$1479.00

Individualized instruction and review in addition, subtraction, multiplication, and division of whole numbers and money and the addition and subtraction of like fractions. The four programs contain a total of 29 lessons; each lesson ends with a summary and test.

ADDITION I
8 Apple II Diskettes.....$432.00
- Addition of one- and two-place whole numbers
- Addition of three- and four-place whole numbers
- Addition regrouping whole numbers, Part 1
- Addition regrouping whole numbers, Part 2
- Adding columns of three whole numbers
- Addition of money
- Adding like fractions
- Adding fractions in lowest terms

(Each title, 1 Apple II Diskette.....$60.00)

SUBTRACTION I
7 Apple II Diskettes.....$378.00
- Subtraction of whole numbers, Part 1
- Subtraction of whole numbers, Part 2
- Subtraction regrouping whole numbers, Part 1
- Subtraction regrouping whole numbers, Part 2
- Subtraction with zeroes
- Subtraction of money
- Subtraction of like fractions

(Each title, 1 Apple II Diskette.....$60.00)

MULTIPLICATION I
7 Apple II Diskettes.....$378.00
- Simple Multiplication facts
- More on multiplication facts and their use
- Multiplication regrouping numbers, Part 1
- Multiplication regrouping numbers, Part 2
- Multiplying by tens and by two-place numbers, Part 1
- Multiplying by tens and by two-place numbers, Part 2
- Multiplication of money

(Each title 1 Apple II Diskette.....$60.00)

DIVISION I
7 Apple II Diskettes.....$378.00
- Simple division of whole numbers
- Dividing with a zero
- Finding a fractional part of a number
- Division with a remainder, Part 1
- Division with a remainder, Part 2
- Division by two-place numbers, Part 1
- Division by two-place numbers, Part 2

(Each title, 1 Apple II Diskette.....$60.00)

ARITHMETIC FUNDAMENTALS II

APPLE II DISKETTE *Grade Level 5-8*

Complete Series (4 Sets, 24 Diskettes).....$1224.00

This series discusses all four operations (addition, subtraction, multiplication, and division) of whole numbers and money and the addition and subtraction of like and unlike fractions. The four programs in the series contain a total of 24 lessons; each lesson ends with a summary and test.

ADDITION II
7 Apple II Diskettes.....$378.00
- Addition, whole numbers II, Part 1
- Addition, whole numbers II, Part 2
- Addition of like fractions and mixed numbers II
- Addition of like fractions in lowest terms and simplest form
- Addition of mixed fractions II
- Addition of unlike fractions II
- Addition of decimals and money

(Each title, 1 Apple II Diskette.....$60.00)

SUBTRACTION II
5 Apple II Diskettes.....$270.00
- Subtraction, whole numbers II
- Subtraction of like fractions, Part 1
- Subtraction of like fractions, Part 2
- Subtraction of unlike fractions
- Subtraction of decimals to hundredths

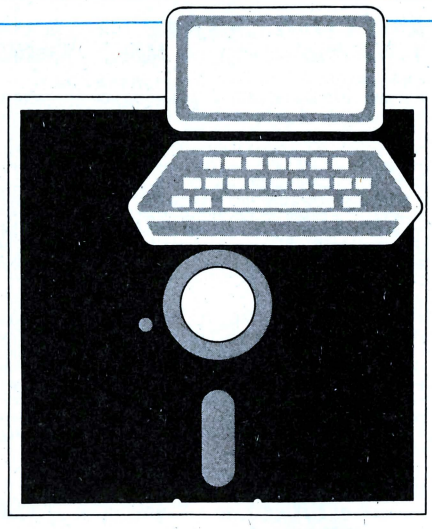
(Each title, 1 Apple II Diskette.....$60.00)

MULTIPLICATION II
6 Apple II Diskettes.....$324.00
- Multiplication by one-place multipliers, Part 1
- Multiplication by one-place multipliers, Part 2
- Multiplication by two-place multipliers, Part 1
- Multiplication by two-place multipliers, Part 2
- Multiplication by three-place multipliers, Part 1
- Multiplication by three-place multipliers, Part 2

(Each title, 1 Apple II Diskette.....$60.00)

DIVISION II
6 Apple II Diskettes.....$324.00
- One-place divisors
- Two-, three-, and four-place dividends
- Three- and four-place quotients
- Two-place divisors ending in zero
- Two-place divisors and two-place quotients
- Three-place quotients and zero in the quotient

(Each title, 1 Apple II Diskette.....$60.00)



BRANCHED INSTRUCTIONAL COURSEWARE

APPLE II DISKETTE

Please see Apple ENGLISH section (page 4) for full description of this special material.

Preview diskettes are available for this courseware. Contact Learning Arts for more information.

IMPORTANT: All programs in the Branched Instructional Courseware section run on an Apple II, and Apple IIe. Not all programs will run on the Apple IIc. Contact Learning Arts for further information.

ARITHMETIC FUNDAMENTALS V

APPLE II DISKETTES *Grade Level 7 and up*

Complete Series (4 Sets, 19 Diskettes).....$969.00

Individualized instruction and review in addition, subtraction, multiplication and division of whole numbers, fractions, money, decimals, percents and three-step measures, and introduces the student to algebraic numerals. The four programs in the series contain a total of 19 lessons.

ADDITION V
4 Apple II Diskettes.....$216.00
- Addition of whole numbers and like fractions
- Addition of like, unlike, and unrelated fractions; addition of three mixed numbers
- Addition of decimals, adding a decimal fraction to a common fraction
- Addition of measures and algebraic numerals; addition of polynomials

(Each title, 1 Apple II Diskette.....$60.00)

SUBTRACTION V
5 Apple II Diskettes.....$270.00
- Subtraction of whole numbers
- Subtraction of like, unlike, and unrelated fractions and mixed numbers V
- Subtraction of decimals
- Subtraction of percents
- Subtraction of measures and algebraic numerals

(Each title, 1 Apple II Diskette.....$60.00)

MULTIPLICATION V
5 Apple II Diskettes.....$270.00
- One-, two- and three-place multipliers
- Multiplication of mixed numbers by fractions, whole numbers, and mixed numbers; multiplication of three mixed numbers
- Multiplication of mixed decimals by whole numbers, decimals, and mixed decimals
- Finding a percent of a number; percents less than 1% or containing fractions of 1%
- Multiplication of measures and algebraic numerals; multiplying a polynomial by a monomial

(Each title, 1 Apple II Diskette.....$60.00)

DIVISION V
5 Apple II Diskettes.....$270.00
- Division by one-, two- and three-place divisors
- Division of mixed numbers by whole numbers, fractions and mixed numbers
- Division of decimals by whole numbers and by decimals
- Percents; expressing fractions as percent
- Division of measures and algebraic numerals; dividing a polynomial by a monomial

(Each title, 1 Apple II Diskette.....$60.00)

ARITHMETIC FUNDAMENTALS III

APPLE II DISKETTE *Grade Level 5-8*

Complete Series (4 sets, 17 Diskettes).....$867.00

Discusses all four operations as applied to whole numbers, fractions, money, decimals, percents, and measure. The four programs in the series contain a total of 16 lessons and each lesson ends with a test.

ADDITION III
4 Apple II Diskettes.....$216.00
- Addition of whole numbers III
- Addition of like fractions III
- Addition of unlike fractions III
- Addition of decimals and measures III

(Each title, 1 Apple II Diskette.....$60.00)

SUBTRACTION III
6 Apple II Diskettes.....$324.00
- Subtraction of whole numbers III
- Subtraction of money III
- Subtraction of fractions III (2 disks)
- Subtraction of decimals III
- Subtraction, measures III

(Each title, 1 Apple II Diskette.....$60.00)
Except: Subtraction of fractions III
(Each title, 2 Apple II Diskettes.....$84.00)

MULTIPLICATION III
3 Apple II Diskettes.....$162.00
- Multiplication by whole numbers III
- Multiplication by fractions III
- Multiplication: decimals, measures, and percent III

(Each title, 1 Apple II Diskette.....$60.00)

DIVISION III
4 Apple II Diskettes.....$216.00
- Division of whole numbers III
- Division of fractions III
- Division, decimals III
- Division of measure and finding percent

(Each title, 1 Apple II Diskette.....$60.00)

ARITHMETIC FUNDAMENTALS IV

APPLE II DISKETTE *Grade Level 6-9*

Complete Series (4 Sets, 13 Diskettes).....$663.00

Discusses all four operations (addition, subtraction, multiplication, and division) of whole numbers, fractions, money, decimals, percents and measures. The four programs in the series contain a total of 13 lessons and each lesson ends with a test.

ADDITION IV
3 Apple II Diskettes.....$162.00
- Addition of whole numbers IV
- Addition of fractions IV
- Addition of decimals and measures IV

(Each title, 1 Apple II Diskette.....$60.00)

SUBTRACTION IV
3 Apple II Diskettes.....$162.00
- Subtraction of whole numbers IV
- Subtraction of fractions IV
- Subtraction of decimals and measures IV

(Each title, 1 Apple II Diskette.....$60.00)

MULTIPLICATION IV
4 Apple II Diskettes.....$216.00
- Multiplication by whole numbers IV
- Multiplication by fractions IV
- Multiplication by decimals IV
- Multiplication by percent and measures IV

(Each title, 1 Apple II Diskette.....$60.00)

DIVISION IV
3 Apple II Diskettes.....$162.00
- Division of whole numbers IV
- Division of fractions IV
- Division of decimals, percents and measures IV

(Each title, 1 Apple II Diskette.....$60.00)

INSTRUCTION AND REVIEW

COMPLEX OPERATIONS

APPLE II DISKETTE *Grade Level 7 and up*

Complete Series (3 Sets, 9 Diskettes).....$459.00

This series was designed for instruction or review in vocational and trade schools, as preparation for college entrance examinations, in college remedial classes and adult education courses, and to fulfill job-training requirements in industry, the military, and government. The three programs contain a total of 9 lessons.

AVERAGES, ESTIMATING, AND FACTORING
4 Apple II Diskettes.....$216.00
- Averages
- Estimating
- Rounding Off
- Factoring

(Each title, 1 Apple II Diskette.....$60.00)

LOWEST COMMON MULTIPLES, EXPONENTS, AND SQUARE ROOTS
3 Apple II Diskettes.....$162.00
- Lowest Common Multiples
- Exponents
- Square Roots

(Each title, 1 Apple II Diskette.....$60.00)

ORDER OF OPERATIONS AND PRACTICAL APPLICATIONS
2 Apple II Diskettes.....$108.00
- Order of Operations
- Practical Applications

(Each title, 1 Apple II Diskette.....$60.00)

DECIMALS: A REVIEW COURSE

APPLE II DISKETTE *Grade Level 7 and up*

Complete Series (3 Sets, 13 Diskettes).....$663.00

Designed to meet the growing need for effective basic and remedial instruction in the area of decimals. The three programs contain a total of 13 lessons; at the end of lesson 13, there is a test which students can use to gauge their understanding of decimals.

DECIMALS, FRACTIONS AND EQUIVALENTS
4 Apple II Diskettes.....$216.00
- Decimal system: whole numbers
- Decimal system: decimal fractions, Part 1
- Decimal system: decimal fractions, Part 2
- Decimal equivalents of common fractions

(Each title, 1 Apple II Diskette.....$60.00)

DECIMALS: ADDITION, SUBTRACTION AND MULTIPLICATION
5 Apple II Diskettes.....$270.00
- Addition and subtraction of decimals
- Rounding off decimals
- Multiplication of decimals
- Multiplying and Dividing by 10, 100, and 1000
- General review decimals: addition, subtraction and multiplication

(Each title, 1 Apple II Diskette.....$60.00)

DIVISION OF DECIMALS
4 Apple II Diskettes.....$216.00
- Decimals: division by 10, 100, and 1000
- Decimals: dividing a decimal by a whole number
- Decimals: dividing a decimal by a decimal
- General review division of decimals

(Each title, 1 Apple II Diskette.....$60.00)

FRACTIONS: A REVIEW COURSE

APPLE II DISKETTE *Grade Level 7 and up*

Complete Series (3 Sets, 15 Diskettes).....$765.00

Designed to meet the growing need for effective basic and remedial instruction in the area of fractions. The three programs contain a total of 15 lessons; each lesson ends with a summary and test.

INTRODUCTION TO FRACTIONS
4 Apple II Diskettes.....$216.00
- Fraction idea
- Comparing fractions, integers, mixed numbers
- Factors and prime numbers
- Multiples and lowest common multiples

(Each title, 1 Apple II Diskette.....$60.00)

ADDITION OF FRACTIONS AND MIXED NUMBERS
4 Apple II Diskettes.....$216.00
- Addition of fractions, Part 1
- Addition of fractions, Part 2
- Addition of mixed numbers, Part 1
- Addition of mixed numbers, Part 2

(Each title, 1 Apple II Diskette.....$60.00)

FRACTIONS: SUBTRACTION, MULTIPLICATION, AND DIVISION
7 Apple II Diskettes.....$378.00
- Subtraction of fractions, Part 1
- Subtraction of fractions, Part 2
- Multiplication of fractions, Part 1
- Multiplication of fractions, Part 2
- Division of fractions, Part 1
- Division of fractions, Part 2

(Each title, 1 Apple II Diskette.....$60.00)

PERCENTAGES: A REVIEW COURSE

APPLE II DISKETTE *Grade Level 7 and up*

Complete Series (3 Sets, 13 Diskettes).....$663.00

Designed to meet the growing need for effective basic and remedial instruction in the area of percentage. The three programs contain a total of 13 lessons; at the end of lesson 13 there is a test which students can use to gauge their understanding of percentage.

FRACTIONS, DECIMALS AND PERCENT
3 Apple II Diskettes.....$162.00
- Changing fractions to percent
- Changing percent to fractions
- Decimals and percent

(Each title, 1 Apple II Diskette.....$60.00)

EXERCISES ON PERCENTAGE
5 Apple II Diskettes.....$270.00
- Finding a percent of a number, Part 1
- Finding a percent of a number, Part 2
- Recognizing percent, base and percentage
- Three types of percentage problems, Part 1
- Three types of percentage problems, Part 2

(Each title, 1 Apple II Diskette.....$60.00)

DISCOUNT, TAXES, SALARIES, AND PROFITS
5 Apple II Diskettes.....$270.00
- Discount
- Taxes
- Commissions
- Interest
- Profit and Loss; Increase and Decrease

(Each title, 1 Apple II Diskette.....$60.00)

HIGHER MATHEMATICS

ALGEBRA: SEMESTER I AND II

APPLE II DISKETTE *Grade Level 9 and up*

Complete Program (2 Series).....$1938.00

Prerequisite: Knowledge of basic algebraic symbols. Lack of a working knowledge of algebraic principles and geometric conceptions hinders a student in dealing with higher mathematics, many areas of science, and other practical applications of problem solving. These programs will furnish a student with eighth grade reading ability the skills necessary to handle algebraic formulas, work with their graphic representations, and understand the theoretical bases of these operations.

ALGEBRA SEMESTER I

APPLE II DISKETTE *Grade Level 9 and up*

Complete Series (3 Sets, 17 Diskettes).....$820.80

VARIABLES AND SENTENCES
2 Apple II Diskettes.....$108.00
- Equations and Inequalities
- Open Sentences

(Each title, 1 Apple II Diskette.....$60.00)

NATURAL NUMBERS AND INTEGERS
8 Apple II Diskettes.....$367.20
- Operations in set N, Part 1 and 2
- Grouping symbols
- Properties of the Operations
- Number line
- Addition and subtraction of integers
- Other operations with integers, Part 1 and 2

(Each title, 1 Apple II Diskette.....$60.00)
Except: Operations in set N, Part 1 and 2
Other operations with integers, Part 1 and 2
which are priced at:
(Each title, 2 Apple II Diskettes.....$84.00)

RATIONAL NUMBERS AND REAL NUMBERS
7 Apple II Diskettes.....$345.60
- Rational number - equality and multiplication
- Multiplicative inverses and division
- Equality and simplification, Part 1 and 2
- Addition, subtraction, powers and roots
- Irrational numbers
- Operations in R (arithmetic of radicals)

(Each title, 1 Apple II Diskette.....$60.00)
Except: Equality and simplification, Part 1 and 2 which is priced at:
(Each title, 2 Apple II Diskettes.....$84.00)

ALGEBRA SEMESTER II

APPLE II DISKETTE *Grade Level 9 and up*

Complete Series (3 Sets, 30 Diskettes).....$1231.20

POLYNOMIALS
7 Apple II Diskettes.....$280.80
- Polynomials: definitions and terms, Part 1 and 2
- Addition and subtraction of polynomials, Part 1 and 2
- Multiplication, division, and powers of polynomials, Part 1 and 2
- Polynomials in more than 1 variable

(Each title, 2 Apple II Diskettes.....$84.00)
Except: Polynomials in more than 1 variable which is priced at:
(Each title, 1 Apple II Diskette.....$60.00)

SOLUTION OF FIRST DEGREE POLYNOMIAL EQUATIONS INEQUALITIES AND VERBAL PROBLEMS
10 Apple II Diskettes.....$410.40
- Systematic solution of equations, Part 1 and 2
- Formulas
- Systematic solution of inequalities, Part 1 and 2
- Mathematical translations of English phrases and sentences
- Number, cost, and motion problems, Part 1 and 2
- Geometric, business, mixture, and work problems, Part 1 and 2

(Each title, 2 Apple II Diskettes.....$84.00)
Except: Formulas
Mathematical translations of English phrases and Sentences
which are priced at:
(Each title, 1 Apple II Diskette.....$60.00)

QUADRATICS, FACTORING, RATIONAL EXPRESSIONS AND COMPLEX NUMBERS
13 Apple II Diskettes.....$540.00
- Systematic solution of quadratic equations, Part 1 and 2
- Quadratic formula and the discriminant, Part 1 and 2
- Factoring polynomials, Part 1 and 2
- Solving equations by factoring (2 diskettes)
- Algebraic functions, Part 1 and 2
- Solving rational equations
- Imaginary and complex numbers
- Operations with complex numbers

(Each title, 2 Apple II Diskettes.....$84.00)
Except: Solving rational equations
Imaginary and complex numbers
Operations with complex numbers
which are priced at:
(Each title, 1 Apple II Diskette.....$60.00)

COMPU-MATH DECIMALS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

A highly motivating program which builds and reinforces math skills. More than just color displays. An animated figure cues a learner's attention to individual components of the equation or concept shown on the screen, helping to break the process down into sequential steps. Learners may advance easily to a new concept or backtrack to review a previous one by pressing the right or left arrow key. Contents: Conversion; Addition, Subtraction, Multiplication, Division of Decimals; Rounding Off Decimal Numbers; Percentage.

COMPU-MATH FRACTIONS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

Highly motivating program which builds and reinforces a learner's mathematics skills. An animated figure cues a learner's attention to individual components of the equation or concept shown on the screen, helping to break the process down into sequential steps. Learners may advance easily to a new concept or backtrack to review a previous one by pressing the right or left arrow keys. Contains: Definition and Parts of the Fraction; Denominators; Addition, Subtraction, Multiplication and Division of Fractions.

CONSUMER MATH

APPLE II DISKETTE J

1 Apple II Diskette, 48K.....$35.00

Calculations relating to earning and purchasing. Includes: Calculating weekly or yearly earnings; Calculating overtime and holiday rates of pay; Calculating the price per ounce; Choosing the best buy. Teacher's guide.

CRITTER COUNT

APPLE II DISKETTE P

1 Apple II Diskette, 32K.....$39.95

Beautifully animated color graphics are used to help young children learn numbers and counting. Simple arithmetic practice exercises and quizzes are included. Covers beginning addition and subtraction. Teacher's guide.

DECIMALS MADE SIMPLE

APPLE II DISKETTE I J H

1 Apple II Diskette, 128K.....$49.95

Topics covered include: Addition of Decimals, Subtraction and Multiplication of Decimals, Numbers, and Division of Decimal Numbers. Your students will learn: how to line up and add columns of whole and decimal numbers; how to calculate place values in the multiplicand, multiplier, and product; how to multiply whole and decimal numbers; and how to format decimal division problems. Teacher's guide.

DECIMAL OPERATIONS

APPLE II DISKETTE I J

Complete Series (4 Sets, 4 Diskettes).....$90.00

"Very complete and useful tool that provides practice in basic operations with decimal numbers, with careful attention to process." **Media Review, Feb 1984.**

A well-designed series in which the student is guided in step-by-step progression. Options are given as to number of problems and size of numbers. Students learn and use correct vertical placement of the problems using the computer screen as a worksheet. All errors are immediately flagged, and an error analysis is given after each problem and at the end of each set. Teacher's guide with each set.

- **Adding Decimals**
- **Subtracting Decimals**
- **Multiplying Decimals**
- **Dividing Decimals**

(Each title, 1 Apple II Diskette, 48K; Backup....$24.95)

DISCOVERY LEARNING IN TRIGONOMETRY

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Student Manual.....$75.00

"...program is easy to operate and clear of system errors." **Curriculum Review, May 1983.** *"An excellent graphing program for supplementing any trigonometry class." Grade A.* **Software Reports, July 1983.**

Covers functions, trigonometric functions, amplitude, period, phase shift, polar coordinates for college and high school trigonometry. Uses discovery learning techniques to introduce students to trigonometric functions and their visual representations. Following the exercise in the student manual, students use the programs to discover how trigonometric functions are represented graphically and the cause and effect relationships between parts of equations and their graphs. Students are also led to analyze equations, taking into consideration such factors as amplitude, period, phase shift, and patterns; to prove that both sides of an identity are equal by transforming one side of the identity into a graph representing the other side; and to graph polar equations.

DONALD DUCK'S PLAYGROUND: MONEY SKILLS

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$39.95

For ages 7-11. Students learn about making change, logical thinking, categorization and matching skills while helping Donald Duck pay for and build a playground set for his nephews.

ELECTRONIC STUDY GUIDE FOR TRIGONOMETRY

APPLE II DISKETTE [H][C]

6 Apple II Diskettes, 48K.....$275.00

Helpful animation and graphics. Dynamic learning tool illustrating important -- but hard to visualize -- trigonometric concepts. Choose the topic you want to master, learn trigonometry at your own rate. Contains a user's guide and six disks, which can be purchased separately or as a complete package.

- Prerequisites for Trigonometry
- Trigonometric Functions
- Trigonometric Graphing
- Analytic Trigonometry
- Oblique Triangles and Vectors
- Complex Numbers

(Each title, 1 Apple II Diskette, 48K; Guide.....$49.95)

ELEMENTARY GEOMETRY SERIES

APPLE II DISKETTE [I]

ELEMENTARY GEOMETRY: AREA AND PERIMETER

1 Apple II Diskette, 48K; Backup.....$45.00

Computer graphics heighten students' interest in identifying quadrilaterals and learning methods for calculating perimeters and areas. Students work at their own pace through interactive tutorial program on quadrilaterals, recording definitions of parallelogram, rectangle, trapezoid, etc., and drawing corresponding figures on the accompanying worksheet. A second interactive tutorial leads your students step-by-step to develop formulas for calculating perimeters and areas of triangles and quadrilaterals displayed in graphics. Includes quiz program. Teacher's guide.

ELEMENTARY GEOMETRY: LINES AND TRIANGLES

1 Apple II Diskette, 48K; Backup.....$44.00

Provides tutorials and quizzes to teach the concepts of geometry. Covers types of lines and classification of triangles. Each lesson has a tutorial and quiz and student handouts are provided for each lesson. Defines parallel, perpendicular, and intersecting lines. Defines different types of triangles, including scaline, isosceles, equilateral, acute, right, obtuse, and equiangular. Use these programs as a teacher's aid for demonstration or for individual or small group instruction. Teacher's guide.

ELEMENTARY GEOMETRY: POINTS AND ANGLES

1 Apple II Diskette, 48K; Backup.....$43.00

Teach and test your students in the important skills of geometry. Presents geometric shapes along with textual information. Designed to cover types of quadrilaterals and areas and perimeters. Each lesson has a tutorial and a quiz. Defines points, lines, and line segments, rays, angles, and degrees. Introduces the following types of angles: right, acute, obtuse, and straight. Provides geometry demonstration to all students or can tutor individuals or small groups. Teacher's guide.

EXPANDED NOTATION PLUS

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$29.95

Developed at the request of many elementary teachers. Provides extra practice on a difficult and frequently tested skill. Introduces the concept of place value and provides the student with practice in writing numerals in a variety of expanded forms. Ten lessons carefully sequenced from tens and ones to thousands. Teacher may modify or create lessons. Teacher's guide.

EXPLORING TABLES AND GRAPHS SERIES

APPLE II DISKETTE [P][I]

EXPLORING TABLES AND GRAPHS GRADE 3-4

1 Apple II Diskette, 48K; Worksheets.....$34.95

An introduction to the way graphs work and how they are used. Children learn about tables...and bar, picture and area graphs. Fun applications and games feature topics like endangered species, world languages and populations, and more! Double-sided disk. Worksheets; teacher's guide.

EXPLORING TABLES AND GRAPHS GRADE 5-6

1 Apple II Diskette, 48K; Worksheets.....$34.95

Students experiment with tables...and picture, bar, line and area graphs. Fun-to-play games and applications -- with topics like satellites, women in industry, per-capita income, and more -- reinforce important lessons and build reasoning and problem solving skills. Double-sided disk. Worksheets; teacher's guide.

ESTIMATION

APPLE II DISKETTE [I][J]

1 Apple II Diskette, 48K; Backup.....$36.00

Sharpens students' estimation skills using whole numbers and decimals. The computer is used in the immediate mode and in the programmed mode to do calculations and help students verify the accuracy of their estimates. Students use the program **Shopping** to apply estimation skills to practical situations. Teacher's guide.

FACT SHEETS

APPLE II DISKETTE [A]

1 Apple II Diskette, 48K; Backup.....$49.95

A great teacher time-saver. This simple menu-driven program literally produces a complete worksheet at the touch of a button! To use the program, the teacher selects: addition, subtraction, multiplication or division, then picks the specific skill. Example (for multiplication): facts (0-3), facts (4's only), etc. Problems on each worksheet are randomly generated so you produce unique worksheets over and over again for the same skill. The teacher can enter 2 full lines at the top of each worksheet for identification or instructions to the student. Answer sheets are also generated. A great program to have in a media center or library where teachers can use it over and over again. Teacher's guide.

FACTS ARCADE GAMES

APPLE II DISKETTE [P][I]

Uses exciting arcade games to provide drill on basic number facts and includes a student management system as well. Each game has a choice of difficulty levels, five speed levels, and length of playing time (1 to 10 minutes). Points are scored for correct answers, with bonus points for completing a round with no mistakes. Points are lost for incorrect answers or giving no answer. Final scores are shown on the screen at the end of the game. Colorful, animated graphics throughout. Teacher's guide.

ADDITION CIRCUS

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Balloons containing addition fact problems float upward in the sky. A correct answer allows the clown to pop a balloon before it hits the circus tent.

SUBTRACTION DEFENDERS

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Cannonballs containing subtraction fact problems fly toward the castle wall. Students defend the castle by typing correct answers to shoot down the cannonballs.

MULTIPLICATION BRIGADE

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Multiplication problems appear in the windows of the burning building. Answering the problems correctly helps the bucket brigade put out the fire.

DIVISION SHOOTING GALLERY

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Ducks containing division fact problems move across the screen in a shooting gallery format. Correct answers allow the student to shoot down the ducks.

FAR STAR: ARCADE MATH

APPLE II DISKETTE [I][J]

1 Apple II Diskette, 48K.....$39.95

Ages 8-12. Greetings, co-pilot of Moon Eagle I. It's up to you to avoid and destroy the falling stars that threaten your ship. You'll have to keep a sharp eye for the Far Star, too. Blast it and score extra points. As you protect your spaceship, you must also solve a math challenge. Three answers appear in Outer Space. Your mission is to dock your ship with the right one. Destroy the wrong answers first and watch your score grow. Joystick required. User's guide.

FRACTION FACTORY

APPLE II DISKETTE [P][I][J]

1 Apple II Diskette, 48K.....$29.95

"...excellent introductory program...outstanding program for the primary grades." **InCider, Sept 1984.**

Colorful graphics and musical sounds to help children see and understand fractions and fractional parts. Students learn to find equal values with different denominators, and are soon learning to add, subtract and multiply fractions. The graphics provide clear examples of what the numbers mean, and when children understand that, then fractions make sense. Teacher's guide.

FRACTION FEVER

APPLE II DISKETTE [P][I]

1 Apple II Diskette, 48K.....$29.95

"...one of the finest examples I have seen of graphic and audio display in educational programs." **InCider, Sept 1984.**

Combines a fast-paced arcade game with a learning game. As you hop along on your pogo stick, you'll be searching for the picture-fraction that matches the fraction at the top of the screen. Spot the correct fraction and ride the Fraction Elevator up to higher floors. Eliminate incorrect fractions along the way and add to your point score. Different visual representations of fractions. Colorful graphics and sound. User's guide.

FRACTION FLIP

APPLE II DISKETTE [I][J]

1 Apple II Diskette, 48K.....$29.99

Motivating practice with initial fraction concepts, identifying fractions expressed in simplest terms and matching fractions to decimal equivalents. Allows single or multiple players with or without competition. Captivating "concentration" game format. Teacher's guide.

FRACTIONS OPERATIONS

APPLE II DISKETTE [I][J]

Complete Series (4 Sets, 4 Diskettes).....$90.00

Well designed programs. All work done on the screen. Exercises are randomly generated and all errors are immediately flagged and explained. Use of split screen provides work space and simultaneous instructions and/or error messages for optimum feedback. Includes management system for student record keeping. Teacher's guide.

ADDING FRACTIONS

1 Apple II Diskette, 48K; Backup.....$24.95

"...a useful addition to a software collection." **Mathematics Teacher, March 1983.**

Excellent practice in adding fractions with uncommon denominators.

SUBTRACTING MIXED FRACTIONS

1 Apple II Diskette, 48K; Backup.....$24.95

"...excellent and quick to the point...excellent treatment of the lowest common denominator." **Microsift, April 1984.**

Problems are composed of positive mixed fractions less than 10.

MULTIPLYING FRACTIONS

1 Apple II Diskette, 48K; Backup.....$24.95

"The consistency and simplicity with which this program operates makes it a valuable resource to support a middle school or junior high school mathematics program." **Media Review, Feb 1983.**

Practice in multiplying fractions and in cancelling or reducing.

DIVIDING FRACTIONS

1 Apple II Diskette, 48K; Backup.....$24.95

Excellent practice in dividing fractions.

GATHERING SPEED SERIES

APPLE II DISKETTE [J]

GATHERING SPEED, Set 1

1 Apple II Diskette, 32K (5 programs).....$169.00

Mathematical operations not found in standard drill programs. Teacher's guide.

Powers and Roots - Raising to a power, raising to a power and multiplying, raising to a power and adding or subtracting, and finding square roots from perfect squares.

Perimeters, Areas, and Volumes - Perimeters of rectangles and squares. Circumference of circles. Areas of rectangles, squares, parallelograms, triangles, and circles. Volumes of rectangular prisms, cubes, and cylinders. Graphic illustrations.

Factoring: Three Lessons - Finding any two factors, finding prime factors, finding prime factors using exponential notation.

Average - Finding the average of numbers in a set, given only the set of numbers; and solving word problems involving finding the average of a series of numbers.

Ratio and Proportion: Five Lessons - Writing a ratio as a fraction, word problems coverting ratios to fractions, finding the missing number in a proportion, finding the missing number using larger proportions, and word problems requiring the student to write and solve a proportion problem.

(Each title, 1 Apple II Diskette, 32K.....$35.00)

GATHERING SPEED, Set 2

1 Apple II Diskette, 32K (5 Programs).....$169.00

"...valuable practice in mathematical topics that relate to real-life needs...good reinforcement in the mathematics of money handling...bare bones drill program...deals with junior high subjects that are not often give CAI treatment." **Courseware Report Card 1983.**

Mathematical operations not found in standard drill programs. Teacher's guide.

Equivalents: Six Lessons - Conversion among fractions, decimals, and percents: rename fractions to decimals, decimals to fractions, percents to decimals, percents to fractions, decimals to percents, and fractions to percents.

Percents: Nine Lessons - Finding a percent of a number. Finding what percent one number is of another. Mixed problems and word problems.

Interest: Three Lessons - Finding the interest using the formula i=prt: where rate and time are whole numbers; rate is fractional, time is a whole number; rate is a whole number, time is fractional.

Discount, Sales Tax, Commission, and Installment Buying - Consumer math including: rounding to nearest cent; finding a percent and rounding to the nearest cent; calculating price of item including sales tax, amount of discount and sale price, amount of commission and total earnings, and installment buying costs.

Word Problems: Six Lessons - Word problems: dealing with whole numbers, fractions and decimals. To accustom your students to working with word problems.

(Each title, 1 Apple II Diskette, 32K.....$35.00)

GALAXY MATH FACTS GAME

APPLE II DISKETTE P I J

7 Apple II Diskettes, 48K.....$174.00

"...many students don't realize they are drilling on math skills but think of the program as a game. Recommended." **Booklist, June 1, 1983.**

Contains 6 Basic Math Programs: (1) whole number addition, subtraction, multiplication, division; (2)place value; (3) fractions; (4) decimals/percents; (5) integers; (6) estimating/rounding. Add extra motivation and challenge to the drill and practice of basic math concepts. The player's ship and crew are on the other side of the galaxy. The objective is to get back to earth without being destroyed by the *Star Field,* the *Black Hole,* or the *Klingons.* To overcome the obstacles they encounter, students must accumulate energy and ammunition by correctly responding to basic math-fact questions. Students try to complete the game, or return to earth, in as short a time as possible. The added challenge of avoiding danger in the space trip provides exciting motivation for performing well. Automatically lowers to an easier level if a student experiences difficulty. Comprehensive teacher's guide.

Each title contains: 1 Apple II Diskette (except Fractions, 2 Apple II Diskettes). Price per title.....$32.95

Galaxy Math Whole Number Operations.....$32.95
Galaxy Math Place Value.....$32.95
Galaxy Math Fractions (2).....$32.95
Galaxy Math Decimals/Percents.....$32.95
Galaxy Math Integers.....$32.95
Galaxy Math Estimating/Rounding.....$32.95

GEOART

APPLE II DISKETTE J

1 Apple II Diskette, 48K.....$39.95

For developing concepts in geometry. Explores the names of the basic shapes, perimeter and area concepts, rotation, reflection and translation.

GEOMETRY: FORMULAS, SHAPES AND SKILLS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$45.00

Graphics and animation stimulate high interest in the plane geometry concepts covered in this unit. Five sequentially-arranged programs. The first provides a drill on identifying the shapes of six polygons. The four remaining programs each contain two options: a tutorial instructing the student on calculating the area and perimeter for a particular shape; and a drill and practice on the calculations covered in the tutorial. The visual and logical presentation of the material makes this intensive, compact unit on plane geometry easy to understand. Teacher's guide.

GET TO THE POINT: WORKING WITH DECIMALS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$55.00

Three imaginative games -- Point of Order, Point in Question and Counter Point -- expose students to the concepts of order of decimals and help them with basic operations involving decimals. Helps students with addition, subtraction, multiplication and division of decimals to three places. Teacher's guide.

GRABIT FACTORY

APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$39.95

For youngsters learning to recognize numerals and beginning to learn addition and subtraction. Using a joy stick, your student operates a crane in The Grabit Factory to pick up number blocks that correctly complete a simple equation such as 2 + 5.

GRAND PRIX

APPLE II DISKETTE P I J

7 Apple II Diskettes, 48K.....$174.00

To win this extraordinarily exciting auto race, students accelerate their knowledge of basic math facts. Students are automatically assigned a performance level in the Grand Prix -- student driver, teacher driver, or Grand Prix driver -- based on their level of math skills. Each level requires greater "driving" and math skills. Students control their cars by using the computer's direction-control keys. Correct answers enable students to change a tire, repair their cars, or refuel. Students race against time to complete 100 laps and math-fact problems. Highly motivating timed drill. Different placement levels give students of all ability levels a chance to succeed -- *and learn.* Comprehensive teacher's guide.

Each title contains: 1 Apple II Diskette (except Fractions, 2 Apple II Diskettes). Price per title.....$32.95

Grand Prix Whole Number Operations.....$32.95
Grand Prix Place Value.....$32.95
Grand Prix Fractions (2 diskettes).....$32.95
Grand Prix Decimals/Percents.....$32.95
Grand Prix Integers.....$32.95
Grand Prix Estimating/Rounding.....$32.95

GRAPHING

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$36.00

Introduces graphics programming on the computer through the use of ordered pairs with both positive and negative numbers. The computer graphics screen is compared to a map. Students use the computer to review ordered pairs, to plot lines on a coordinate system, and to plot simple graphic figures. Shows how ordered pairs are used in creating computer graphics. Quiz included. Includes four programs, handout, and transparencies. Teacher's guide.

GRAPHING CAN BE FUN

APPLE II DISKETTE I

2 Apple II Diskettes, 48K.....$55.00

Simplified instructions on the purpose of graphs, their interpretations, and construction. Graphs become understandable and fun as they visually come to life via the microcomputer. Reproducible student skill pages are included in the teacher's guide.

Pie and Line Graphs
Bar and Picture Graphs
(Each title, 1 Apple II Diskette.....$29.95)

GRAPHING EQUATIONS
(Including Green Globs)

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Backup.....$60.00

"The games are stimulating and encourage thought and creativity...excellent example of the computer's potential as an educational aid." **Curriculum Review, April 1984.**

Four programs: **Linear and Quadratic Graphs** gives students guided practice with equations of lines, parabolas, circles, ellipses, and hyperbolas. **Green Globs** is a popular game in which students apply what they are learning about graphs. **Tracker** is a game that deals with linear and quadratic graphs. The object of the game is to locate graphs hidden in the coordinate plane and then determine their equations. **Equation Plotter** is a general utility program that graphs equations entered by the student. The student can set the bounds of the variables to graph equations over desired intervals. Teacher's guide.

GRAPHING, LOGIC AND EQUATIONS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$46.00

Central concepts in secondary mathematics, including coordinate geometry, algebra, and logic. **Slope, Polygraph,** and **Polar,** all versatile graphing utilities, enable students to explore concepts such as slope, intercepts, roots of equations, symmetry, concavity, and translations in both rectangular and polar coordinates. **Algebra** provides guided practice in solving linear equations. **Bagels** is a number guessing game that strengthens logical thinking skills. **Snark, Radar,** and **ICBM** provide practice in coordinate geometry concepts within a game format. Teacher's guide.

GRAPHMASTER

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$49.00

Allows users to generate the graph of any cartesian or polar function, to overlay serveral graphs, to zoom in on points of particular interest, and to quickly approximate the integer of any function. Options allow users to experiment with variables. Can be used in either a simple or more involved mode. Ideal as a teacher utility for demonstrating properties of functions and graphing concepts in Trigonometry, pre-Calculus, and Calculus or as a discovery learning tool for Junior High and High School Algebra students. Backup; teacher's guide.

GRAPHS, READING AND INTERPRETING

APPLE II DISKETTE I

1 Apple II Diskette, 48K.....$35.00

Reading and interpreting information from graphs. Includes: Pictographs, Circle Graphs, Bar Graphs, Line Graphs.

GREAT NUMBER CHASE

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$39.95

The chase is on as your students guide a firefly through a maze. Along the way, the firefly must form the correct mathematical equation that scores points and wins the game. Look out for stomping footprints and be careful not to run out of energy. This game has loads of action, but along the way, students sharpen important basic skills in mathematical functions and operations, as well as visual perception and problem solving. A variation even allows kids to construct their own mazes to become game-makers themselves! User's guide.

GUESS MY RULE

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K; Backup.....$49.00

Gives students a rich problem-solving math environment in which to study what happens, look for patterns, and find ways to express these patterns as rules or algorithms. Patterns are displayed numerically, as numbers in a table, and graphically, as points and lines plotted on a set of axes. Thus, students have alternate modes to help them to think, compare, and learn. Simulated manipulative activites add a further learning dimension. Because students and teachers can enter new rules, the skill level can be adjusted to fit the mathematical knowledge of students in middle school or in intermediate high school algebra courses. Includes: Guess-a-rule; Make-a-rule; Rule Activities. Backup; teacher's guide.

HEY, TAXI: MATH PROBLEMS

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$39.95

Children maneuver their cab through the city streets to pick up passengers. Students solve basic math facts problems to collect their fare, watching out for the competitive cab company, traffic fines, and speeding tickets. Covers addition, subtraction, multiplication, and division of whole numbers. Teacher's guide.

HIGH SCHOOL MATH

APPLE II DISKETTE H

NOTE: This is also useful for advanced junior high students or for remedial study and review at the college level. Programs provide instruction and then generate randomized problems from a large bank of exercises. The student supplies the final answer. (Students may or may not need to use pencil and paper to do intermediate figuring.) Therefore, faster students need not go through every step of every problem before they can get to the answer, and slower students can work out answers at their own pace, seeing the figures on paper. Every incorrect problem is explained and all the intermediate steps are shown for the problems that are answered wrong. The computer keeps track of the number of problems attempted and the number correct. Attractive use of color and graphics makes the problems more enjoyable. Teacher's guide with each set.

HIGH SCHOOL BASIC MATH

1 Apple II Diskette, 48K.....$29.95

Whole numbers, order of operations, decimals, fractions, percents, ratios and proportions.

HIGH SCHOOL BASIC ALGEBRA

1 Apple II Diskette, 48K.....$29.95

Integers, absolute value, rational numbers, polynomials, graphing inequalities on a number line, solving first degree equations and inequalities and algebraic fractions.

HIGH SCHOOL GEOMETRY

1 Apple II Diskette, 48K.....$29.95

Types of angles, parallel and intersecting lines, polygons, perimeters, areas, volumes, circles and the Pythagorean Theorem.

HIGH SCHOOL INTERMEDIATE ALGEBRA

1 Apple II Diskette, 48K.....$29.95

Exponents, radicals, solving quadratic equations, graphing lines, the distance formula, solving systems of equations, logarithms, and sequences.

HIGH SCHOOL PROBLEM SOLVING

1 Apple II Diskette, 48K.....$29.95

Strictly designed to teach methods of solving "applications" or "story" problems. Integer problems, geometric problems, averages, age problems, distance problems, work problems, coin problems, mixture problems, permutations and combinations.

HIGH SCHOOL MATH COMPETENCY

APPLE II DISKETTE H

2 Apple II Diskettes, 48K; Backups.....$99.00

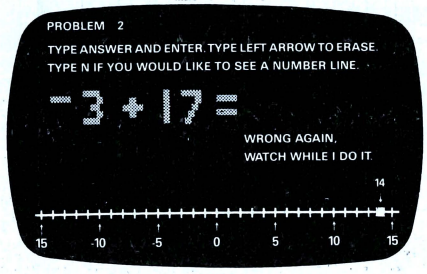
For drill and remediation in the basic skills of mathematics. The program content is based on the New York State curriculum guidelines for competency in mathematics. Contents: Whole Numbers, Fractions, Decimals, Basic Percent, Primes and Factors, Integers, Algebra, Geometry, Ration and Proportion, Probability, Statistics, Percent Word Problems, Money Problems, and Miscellaneous Problems.

INTEGERS/EQUATIONS

APPLE II DISKETTE I

2 Apple II Diskettes, 48K; Diagnostic Tests.....$39.95

Helps middle school student have a better understanding of integers. Includes instruction and practice on the 4 basic operations with integers; simplifying expressions with like and unlike terms; solving simple linear equations; and identifying and using the commutative, associative, and distributive properties. Lesson content may be modified. Carefully sequenced with hints and explanations. Lesson easily modified. Teacher's guide.



INTEGERS/INTEGER FAST FACTS

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$34.95

"...a worthwhile drill package." **Courseware Report Card, Sept 1982.**

Integers - Teaches the four basic operations with positive and negative numbers. Great for students first learning to work with signed numbers. The computer randomly generates problems and gives students prompts and rules for solving the problems. The program tracks mistakes and provides feedback to encourage improvement. **Integer Fast Facts** - provides timed practice on integer operations in a highly motivating arcade game format. Scores based on speed and accuracy. Teacher's notes.

INTRODUCTORY ALGEBRA

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$34.95

Exercises utilizing: Distributive law and like terms, Equations with brackets, Substitutions, Binomials, Trinomials, Multiplication and Division of terms, and more. The format is question and answer with 3 levels of difficulty. This program can generate up to 9,488,581,263,360 different examples.

IT'S ABOUT TIME

APPLE II DISKETTE P

1 Apple II Diskette, 48K.....$39.95

Three different time games to help students K-4 practice the hours, half-hours, and quarter hours.

KINDER KONCEPTS – MATHEMATICS SERIES

APPLE II DISKETTE P

1 Apple II Diskette, 48K (15 Programs).....$65.00

Delightful math readiness program developed by educators and field tested in many kindergarten classrooms. Colorful, interesting games and activities designed to teach "less", "more", number sequence and many other skills. Large graphics, sound and on-screen motion keep children's attention. No reading is required and no time limit is imposed. Ten examples presented for each concept. Correct responses receive immediate auditory and visual reward. After two incorrect responses, the computer gives the correct answer. On-screen graphics keep a runnng score for student's and teacher's reference. A delightful way to introduce the computer while building math readiness skills.

MASTERTYPE'S FIGURES AND FORMULAS

APPLE II DISKETTE I J H

1 Apple II Diskette, 64K.....$29.95

A "computing encyclopedia" of weights and measures. Broaden your students understanding of measurement systems as the program teaches them to calculate anything -- big and small, practical and absurd -- in an easy and entertaining way. Convert currencies, adapt recipes, translate metric measures to American standards and more. The program even includes "flash card" math quizzes. And with the "quiz" mode, you can even create customized tests! A practical reference and working tool. User's guide.

MATH BLASTER

APPLE II DISKETTE P I

2 Apple II Diskettes, 48K.....$49.95

"...a big improvement on traditional drill-and-practice programs." **InfoWorld, Jan 11, 1983.**

Contains over 600 problems in addition, subtraction, multiplication, division, fractions and percents as well as an easy-to-use, versatile editor which allows you to add your own sets of facts. Excellent for math facts, both learning and drill, with a fun game to test skills. Helps students memorize math facts that are essential to building basic math skills, improve their accuracy and increase their speed. The problems are grouped in "families of facts" and can be used with four different learning activities, including a fast-action arcade game. Classroom tested. 60-page user's guide.

MATH DIAGNOSTIC GUIDE

APPLE II DISKETTE P I J

2 Apple II Diskettes, 48K.....$69.00

Since "nothing succeeds like success", this guide is designed to place students at the success level. It determines each student's math achievement level through a selection of questions within specific ranges of difficulty. The program will complement standardized achievement tests and give you the results immediately. Computer analyzes student's math needs to facilitate successful further instruction. Teacher's guide.

MATH FACTS GAMES SERIES

APPLE II DISKETTE I J

MATH FACTS GAMES I

1 Apple II Diskette, 48K.....$34.95

To provide highly motivating practice on the 400 basic math facts in addition, subtraction, multiplication and division. The user may choose any operation or combination of operations at any one of four levels of difficulty. In Math Facts Game I the user plays against the computer. Contents: Count-Down; The Secret Word; Tic-Tac-Toe; Great Computer Challenge. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH FACTS GAMES II

1 Apple II Diskette, 48K.....$34.95

Fast action math fun. User plays against the computer or against another player. Two player games. Contents: Stop the Fact; Guide the Answer; Find the Answer; The Great Fact Race. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH FACTS WORKSHEET GENERATOR

APPLE II DISKETTE A

1 Apple II Diskette, 32K; Backup.....$35.00

Generates worksheets with addition, subtraction, or multiplication problems. The program is very flexible in the type of problems generated. You control the number of digits and the range of each of the numbers. In a multiplication worksheet, for example, you can control the number of digits in the multiplier as well as the multiplicand. You control the range of numbers allowed as well. All problems are randomly generated. Multiple copies of the worksheet can be printed. An answer key can also be printed. The answer key shows each step of the solution so that intermediate steps can be checked. A printer with at least 80 columns is required. Teacher's guide.

MATH FOR ALL AGES SERIES

APPLE II DISKETTE P I J

Complete Series (4 Sets; 16 Diskettes).....$450.00

A sequential, curriculum based mathematics program. Includes addition, subtraction, multiplication and division. Skills developed in the program include simple problems using pictures for easy understanding, speed drills for mastering basic facts, and complex problems involving multiple digits and regrouping. Comprehensive teacher's guide contains reproducible testing materials. A student management system is included on each disk.

MATH FOR ALL AGES: ADDITION
4 Apple II Diskettes, 48K.....$115.00

MATH FOR ALL AGES: SUBTRACTION
4 Apple II Diskettes, 48K.....$115.00

MATH FOR ALL AGES: MULTIPLICATION
4 Apple II Diskettes, 48K.....$115.00

MATH FOR ALL AGES: DIVISION
4 Apple II Diskettes, 48K.....$115.00

MATH/LOGIC GAMES

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K; Backup.....$49.00

A collection of math games designed to strengthen estimation, logic, and basic math skills. Each game may be played by one or more players. Includes: **Dr. Factor** - a study of factoring; **Even Wins** - inductive reasoning and basic math skills; **Crazy Dice** - players figure out the mathematical operation underlying a succession of graphically represented dice rolls; **Bubbles** - designed to improve estimation skills. Backup; teacher's guide.

MATH MAN

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

"...a step beyond arithmetic drill and a good prelude to algebra." **Creative Computing.**

A math game with 12 selectable levels of difficulty and 4 speeds. Player must maneuver Math Man through a system of ladders and girders by performing various mathematical operations that turns one number into another. For example, to turn the target number 21 into the goal of 46, the player must maneuver Math Man through a path which will pick up a multiplication sign, a "2", a plus sign and a "4".

MATH MASTERY GRADES 1-8

APPLE II DISKETTE P I J

Combines guided math drill, an arcade-style reward game, and a student management system. Each disk offers a choice of carefully selected difficulty levels from beginning to advanced. The computer leads students through the problems step by step checking each response in sequence. After three errors, it displays the proper response. At the end of each set of problems, the program places students at a higher difficulty level, the same level, or a lower level, based on the percent correct. Problems presented per level is preset at 10 but may be changed by the teacher to any number from 1-50. Students are rewarded for good performance with a chance to play an arcade-style game. Student management records up to 200 student files. Teachers may choose to view, print, or delete all student files or only those of an individual student. Teacher's guide.

ADDITION AND SUBTRACTION MASTERY
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

MULTIPLICATION AND DIVISION MASTERY
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

DECIMALS: ADDITION AND SUBTRACTION MASTERY
1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

DECIMALS: MULTIPLICATION AND DIVISION MASTERY
1 Apple II Diskette, 48K.....$39.95
1 Apple II Disketter, 48K; Backup.....$54.95

MATH ON COMPUTERS

APPLE II DISKETTE P I J

Clear, well-organized, interactive instruction in math concepts and operations. More than just drill and explanation. Each lesson begins with instruction. A special feature then allows students to give sample problems to the computer to work. Student observes. Student then does his own problems, randomly presented by the computer. Great flexibility in numbers of problems. Includes branching. Immediate "friendly" feedback. Each concept taught is then enhanced by a game or an interesting activity. Content, use of graphics, type of reinforcement and feedback all very high quality. Addition of thought-provoking games and activities an extra bonus. Teacher's guide. A Quality Educational Designs Program.

FACTORING WHOLE NUMBERS
3 Apple II Diskettes, 48K.....$90.00

"Definitely a cut above the usual drill and practice...highly interactive programs." **Computing Teacher, Jan 1981.**

Factor Pairs; Pairs and Squares; Primes and Composites; Exponents; Highest Common Factor; Least Common Multiple; Others.

MATH ON COMPUTERS: DECIMALS
4 Apple II Diskettes, 48K.....$120.00

"...extremely thorough treatment of its subject." **Courseware Review 1982.**

Shifts Left and Right; Reading Decimals; Adding Decimals; Approximating Decimals; Multiplying Decimals; Dividing Decimals; Estimating Answers; Others.

MATH ON COMPUTERS: FRACTIONS
6 Apple II Diskettes, 48K.....$175.00

"These programs split the learning process into manageable bites..." **Computing Teacher, Jan 1982.** *"This is a remarkable set of programs..."* **C.U.E. Newsletter.**

24 programs: Concepts; Equivalent Fractions; Division Meaning; Fractions and Measurement; Multiplying Fractions; Multiplication Shortcuts; Adding Fractions; Comparing Fractions; Mixed Numbers; Others.

MATH PRACTICE AND WORKSHEET/TEST GENERATOR

APPLE II DISKETTE I J

Help your students practice number problems, both on the screen and with the customized printed worksheets that are generated by this program. Graphics rewards, hints when needed, level finders, achievement tests and record management make these materials a complete mathematics tool for the teacher. Approximately 200 multiple choice problems on each disk, divided into 10-12 ranges. Teacher's Key Program provides answers and customized printouts for student practice or testing away from the computer. Teacher's guide.

WHOLE NUMBER PRACTICE AND WORKSHEET/TEST GENERATOR
6 Apple II Diskettes.....$199.95

Addition; Subtraction; Multiplication; Division; Mixed Operations; Teacher's Key.

FRACTION PRACTICE AND WORKSHEET/TEST GENERATOR
6 Apple II Diskettes.....$199.95

Addition; Subtraction; Multiplication; Division; Mixed Operations; Teacher's Key.

DECIMALS AND PERCENTS PRACTICE AND WORKSHEET/TEST GENERATOR
6 Apple II Diskettes.....$199.95

Addition; Subtraction; Multiplication; Division; Mixed Operations; Teacher's Key.

MATH QUIZ

APPLE II DISKETTE

Complete Series (3 Sets, 3 Diskettes).....$63.00
Each set contains 400 questions and answers, arranged by topic, in multiple choice, true/false, fill-in and short answer formats. Two games included on each disk. Opportunity to review. User's guide.

GENERAL MATH QUIZ
1 Apple II Diskette, 32K.....$27.00
Math History, Numbers, Roman Numerals, Properties, Sets, Other Bases, Multiples, Factoring, Powers, Roots, Reciprocals, Series and Progressions, Ratio and Proportion, Probability, Combinations and Permutations.

GEOMETRY QUIZ
1 Apple II Diskette, 32K.....$27.00
Lines and Angles, Curves, Triangles, Circles, Quadrilaterals, Polygons, Solids and Volume, Areas, Geometry Vocabulary.

WORD PROBLEMS QUIZ
1 Apple II Diskette, 32K.....$27.00
Distance and Speed Problems, Work Problems, Mixture Problems, Tax Problems, Interest Problems, Discount Problems, Percent Problems, General Word Problems, Measurement.

MATH WORLDS: EXPLORING MATHEMATICS WITH COMPUTERS

APPLE II DISKETTE

5 Apple II Diskettes, 48K; Book.....$249.95
Outstanding Software Award 1985. **Classroom Computer Learning.**

Adapted from materials developed under the Math Network Curriculum Project. The student is drawn into exploring the world of mathematics when computer-generated situations require that math be used as a tool. For example:

* Students learn to use algebra as a tool in a world where things happen only if the student can express him or herself using an algebra-like language to tell the computer what to do.
* Sampling and simple probability concepts become real problem-solving tools if the student can use them to schedule television prime time shows, competing against computer generated schedules.
* Scatter plots and bar graphs take on a new meaning when students can use them to explore the demography of the population of an alien planet, Ugizi.
* Students can apply principles of symmetry and geometry to create fascinating pictures using a turtle graphics language.

Includes 7 units of instruction each designed for about two weeks instruction. A detailed teacher's guide included with each unit.

MEASUREMENTS: CONVERSIONS AND WORD PROBLEMS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$35.00
Conversions and word problems for each area. Length: inches, feet, years, miles. Weight: ounces, pounds, tons. Liquid measure: fluid ounces, pints, quarts, gallons. Time: seconds, minutes, hours, days, weeks, months, years. Each problem requires conversion from one unit to another. Guide.

METRIC SKILLS

APPLE II DISKETTE

2 Apple II Diskettes, 48K; Diagnostic Tests.....$49.95
Introduces metric terminology and relationships. Practice drills. Skills include identification of prefixes and their values; writing symbols correctly; converting between different metric units; selecting the best unit of measure for a given problem, and estimating the measure of familiar objects in terms of metric units. Includes hints or explanations if needed. All lessons easily modified by the teacher. Special math symbols and shapes are available for the teacher to use in modifying the lessons to meet individual student needs. Teacher's guide.

MILLIKEN MATH SKILLBUILDERS

APPLE II DISKETTE

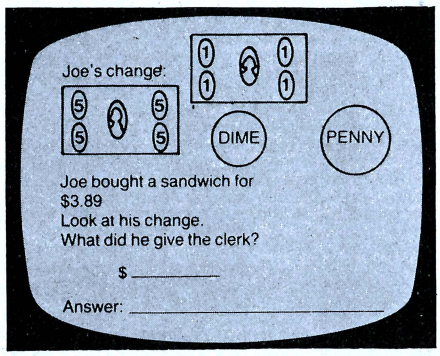
This classroom-tested series is designed to take a student through a progressive sequence of various mathematical concepts. Skill-enhancing programs include addition, subtraction, multiplication, division, fractions and percents. These various programs feature up to 64 levels of difficulty from simple to complex. It's a computer course employing the techniques of drill and practice in a way which develops the student's mathematical proficiency quickly and intelligently with the help of graphic reinforcements.

Each title contains: 1 Apple II Diskette, 48K and a teacher's guide. Price per title.....$34.95
Addition Sequences.....$34.95
Subtraction Sequences.....$34.95
Multiplication Sequences.....$34.95
Division Sequences.....$34.95
Fractions Sequences.....$34.95
Percents Sequences.....$34.95

MISSION: ALGEBRA

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$44.95
Your sister ship has crashed on an asteroid, and you must find her. To discover her path, you must determine the equation of a line, because her communication computer is malfunctioning. Then, you must solve for "Y" to find the coordinates for a point on her path. Moving to the screen which displays the stellar map, you plot the stellar coordinate (x,y coordinate pair). Solve the problem correctly and win points. Occasionally, the communciation computer comes back to life, and you get a chance to guess the next point in the path, which adds excitement to the game. A comprehensive learning tool with thousands of linear algebra problems of varying difficulty levels generated by the program. Workspace is provided on the screen to help solve the equations, and with each step you make toward solving the equation, you receive immediate feedback. Help is available with the press of a key. Specific explanations and examples of steps you can take to solve the problem are provided. Comprehensive teacher's manual.

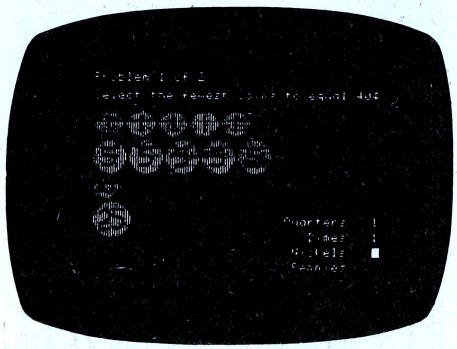


MONEY! MONEY!

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95
"...good for elementary grades and excellent for older special education students to help them learn money skills." **Booklist, Sept 1983.**

Teaches counting money, making change and solving simple word problems about money. Student determines amounts shown (coins and bills); works with the concept of more and less; solves simple word problems; determines if the right amount of money has been given and checks for correct change. Teacher can modify and create new lessons. Program is very flexible. Teacher's guide.



MONEY SKILLS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95
Provides highly interactive drill in money skills, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program. Lessons include Pennies, Nickels, Dimes, Quarters, Half-dollars and Dollars. Within each lesson, students may choose one of the following levels: Count Money, Can You Buy?, Select Fewest Coins, How Much Change? Problems are randomly generated and students control the pace of the presentation. A challenging arcade-style game rewards good scores (pre-set by teacher). Includes management system. Teacher's guide.

MY VERY OWN CALENDAR

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$49.95
The past and the future come to life for your students as they enter special days on their own personal calendars. Unique set of guided activities sparks cognitive learning and reinforces calendar skills by challenging your youngsters to play and win a variety of calendar games. Teach days of the week, months of the year, weather, and holidays with colorful graphics.

NUMBER FACTS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95
Highly interactive drill in number facts, motivates students with an arcade-style reward game and includes a management system. Students choose from four lessons: Addition, Subtraction, Multiplication, and Division Facts. Within each lesson students may choose to practice one of several levels. Problems are randomly generated. At the end of each set of questions, students are automatically placed at a higher level, lower level, or the same level depending on their scores. If they have scored a certain percentage they may choose to play a game. Teacher's guide.

NUMBER FACT SHEETS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$29.95
1 Apple II Diskette, 48K; Backup.....$44.95
A teacher resource disk which randomly generates worksheets, and corresponding answer keys, containing 2 to 40 number facts. The user first selects from these operations: addition, subtraction, addition and subtraction, multiplication, division, and multiplication and division. The user then selects the parameters from which the problems are generated. User's guide.

NUMBER FARM

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$29.95
Six lively, entertaining games with a farmyard theme help students with counting, number skills and numeral recognition. Good graphics. Includes Number Farm, Hen House, Old McDonald, Animal Quacker; Horseshoes and Crop Count. User's guide.

NUMBER STUMPER®

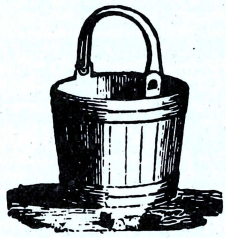
APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95
A compellingly clever way to think about numbers. Children develop abstract reasoning and strategic thinking skills by adding and subtracting. Clicking dice and pot o'gold charm any child. User's guide.
Number Stumper is a trademark of The Learning Company

ORDER OF OPERATIONS PRACTICE

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$29.95
Provides practice in order of operations with addition, subtraction, multiplication, division and parenthesis. Option of working with either whole numbers or signed numbers is given. All numbers and operations in the expression are generated randomly and all results are integers. Each expression contains three operations and one set of parenthesis. A typical example would be 3*(8 - 2)/6. The student simplifies the expression one step at a time on the screen. All errors are immediately flagged and explained. When the problem has been completed, a summary of the steps in the solution is shown on the screen.



OVERFLOW 1

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$29.95
Helps younger students with addition, subtraction, multiplication and division. A game of strategy in which two players try to fill a bucket to overflow with water taken from a beaker. Once a player answers a simple math problem correctly, s/he can choose what fraction of water to enter into the bucket. Students can select the operation or combination of operations they wish to study. Hi-res graphics. Teacher's guide.

PERCENTS

APPLE II DISKETTE

1 Apple II Diskette, 48K; Worksheets.....$49.95
Excellent presentation and review of percents including readiness skills, solving for percentage, solving for base, solving for percent, solving word problems, percent increase or decrease. Follow-up and reinforcement materials included in teacher's guide and accompanying tablet of reproducible worksheets and tests. *NOTE: Will not work on the Apple IIc.*

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PIECE OF CAKE

APPLE II DISKETTE P

1 Apple II Diskette, 48K.....$34.95

Math games based on a magical bakery where children learn to add, subtract, multiply and divide by keeping count of cakes as they come from the oven and are sold to customers. Students add and subtract total or figure the number of slices by multiplying and dividing. The game demands fast work to keep the cakes from falling on the floor, so math skills become important. If a student has trouble, the bakers will help and explain how to do the problem. Color graphics. Teacher's guide.

PLANE GEOMETRY

APPLE II DISKETTE H

8 Apple II Diskette, 48K; Backup.....$599.00

Each title consists of two diskettes, a Tutorial disk and a Drill and Practice disk. The Tutorial introduces students to the mathematical principles, formulas, strategies and techniques necessary for successful problem solving. The Drill and Practice diskette provides the student with drill and help on the topics covered in each title. Titles: Coordinate Geometry; Measurements Involving Angles of a Circle; Trigonometry of a Right Triangle; Proportionality. User's guide.

PLOT/GUESS THE RULE

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.95

"...a very exciting program which should be in every algebra, analytic geometry and calculus classroom." **The Computing Teacher.**

Plot - Utilizes the power of the computer to graph any function you can create. **Guess the Rule** - In arcade format, encourages students to guess the computer's secret equation. Develops concepts of functions, ordered pairs and truth tables. Teacher's notes.

POLYNOMIALS: FACTORING

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$49.95

Three levels of difficulty for developing skills in factoring: multiple-choice, fill in the missing term, or give the factors for a given expression. At each level of difficulty, sufficient help is provided for the student to obtain the correct answer whenever errors are made. Throughout the use of these tutorial programs, a summary of the student's progress is being tabulated and is displayed after the completion of a set of 10 problems. Contents: Factoring Trinomials; Factoring Perfect Square Trinomials; Factoring the Difference of Square; Factoring Trinomials with Common Monomial Factors; Multiplying Binomials. Teacher's guide.

POWER DRILL

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$55.00

Reinforces basic computation and takes the students into estimation and thinking about numbers. Teaches students how estimation will help them solve problems. Includes 4 games: Altogether; What's the Difference; Easy Times and Hard; and The Great Divide. Teacher's guide.

PRESCRIPTIVE MATH DRILL

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Backup.....$79.95

"...a very good program." **School Microware Review, Winter 1982.**

Simple, easy to use program which provides drill and practice on the facts in addition, subtraction, multiplication and division. Teacher enters the student's name and specifies the percent of accuracy that the student must obtain to be branched to the next level. The student may choose the operation with which to work. 20 randomly presented problems are given at the level specified by the teacher. The goal the student must obtain is shown on the screen. As correct answers are given, the student can watch his/her progress toward the goal. Disk has student management. Records may be added or deleted. Optional sound. Backup; teacher's guide.

PRIME NUMBERS

APPLE II DISKETTE J

1 Apple II Diskette, 48K; Backup.....$44.00

Prime numbers have many uses in mathematics. This package helps students discover the properties of prime numbers as they formulate hypotheses and test them on the computer. The concept of an algorithm is introduced both in the computer programs and in the method of determining primes. Also gives practice in tabling, pattern searching, and problem solving. In a concluding activity, students sharpen their factoring skills while they play **Factor Whiz.** Teacher's guide.

PRE-ALGEBRA SERIES

APPLE II DISKETTE J

Complete Series (18 Sets; 18 Diskettes); Backups...$899.10

Now you can have a complete support program for pre-algebra students. Includes instruction and practice. Designed to be used during the two years just before a student takes Algebra, whether on a standard or advanced-placement track. Also very useful as review and remediation for Algebra students needing special help. Teacher's guide.

Each set contains an Apple II Diskette, 48K with backup.

PRE-ALGEBRA: WHOLE NUMBERS.....$49.95

Selectable ranges of numbers and numbers of problems. Includes: addition, subtraction, multiplication and division plus combining operations and a mental arithmetic exercise.

PRE-ALGEBRA: NUMBER THEORY.....$49.95

Provides the student with an interesting way to explore some topics from number theory. Includes: Primes and Composites, Prime Factorization, Divisibility Tests, L.C.M. and G.C.F., Square Roots.

PRE-ALGEBRA: FRACTIONS.....$49.95

All operations with fractions plus a game that allows students to have fun while working with fractions. Gives the student the background for more advanced pre-algebra and algebra topics.

PRE-ALGEBRA: DECIMALS.....$49.95

Provides students with review work on decimals. All operations. Tutorial practice or timed drill option. Includes a game.

PRE-ALGEBRA: PERCENTS.....$49.95

Converting a fraction to a percent; computing discounts; converting percents to fractions, decimals to percents, percents to decimals; finding base, rate and percentages; sales tax and discounts.

PRE-ALGEBRA: METRIC.....$49.95

Gives information on the metric system prefixes along with the associated place value. Activities are provided for length, weight, capacity, and temperature.

PRE-ALGEBRA: GEOMETRY.....$49.95

Understanding and identifying geometric figures.

PRE-ALGEBRA: PERIMETER, AREA AND VOLUME.....$49.95

Students learn about perimeter, area, and volume through examples and practice. The student is given the option to work with either metric or customary units. Graphic displays used to illustrate each concept.

PRE-ALGEBRA: INTEGERS.....$49.95

An abundant use of graphics helps the student to compare integers and learn about absolute value, as well as learn the four basic operations.

PRE-ALGEBRA: NUMBER PROPERTIES.....$49.95

Associative, commutative and distributive property, as well as the order of operations. Special properties of closure, identity, and inverse along with properties of zero and one are included.

PRE-ALGEBRA: OPEN NUMBER SENTENCES.....$49.95

Simplifying and solving open number phrases and sentences. Translating word problems into mathematical sentences. Includes: Number Phrases and Sentences; Solving Number Sentences (+, −); Solving Number Sentences (×, ÷); Solving Inequalities; Words to Symbols.

PRE-ALGEBRA: RATIOS AND PROPORTIONS.....$49.95

Includes: Ratio and Proportion; Writing Proportions; Similar Figures; Scale Drawings; Special Ratios.

PRE-ALGEBRA: COORDINATE SYSTEM.....$49.95

Includes: Graphing Ordered Pairs; Using Coordinates; Graphing Equations; Graphing Inequalities; Create-A-Sketch.

PRE-ALGEBRA: SCIENTIFIC NOTATION.....$49.95

A comprehensive tutorial treatment of scientific notation. Includes: Exponents; Special Exponents; Powers of Ten; Scientific Notation; Products and Quotients.

PRE-ALGEBRA: PRECISION AND ACCURACY.....$49.95

Provides experience in determining the unit of measure, greatest possible error, relative error and percent error. Includes: Unit of Measure; Error of Measurement; Significant Digits; Rounding; Estimation.

PRE-ALGEBRA: PROBABILITY.....$49.95

The terminology necessary for finding the probability of an event is covered along with the adding and multiplying of probabilities. Includes: Probability; Multiplying Probabilities; Adding Probabilities; Odds; Exploring Probability and a utility program allowing students to simulate experiments of their choice.

PRE-ALGEBRA: STATISTICS.....$49.95

Makes statistics easily understandable. Includes: Average; Median and Mode; Frequency Distribution; Graphing; Finding Statistics.

PRE-ALGEBRA: SETS TUTORIAL.....$49.95

Presents mathematical concepts of sets, subsets, and operations of union and intersection with sets. Definitions, terminology, and symbols are enchanced with the use of color graphics.

PROBABILITY

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$36.00

The study of probability is greatly enhanced by using a computer. The computer can easily simulate probabilistic events, producing the outcome within seconds. Also, where it is necessary to examine a listing of all possible outcomes for a particular random experiment, the computer can accurately prepare such a listing and can identify all of the favorable outcomes. Illustrates the large number and multiplication principles of probability. Includes probability worksheet and quiz. Teacher's guide.

PROBLEM SOLVING IN MATH SERIES

APPLE II DISKETTE I

Helps students learn a variety of skills to aid in solving math problems such as reading carefully and paying attention to details, looking for clues, learning clue words for mathematical operations, identifying the goal, and using systematic trial and error strategy. Teacher's guide with each set. A Micro School Program from Bertamax, Inc.

PROBLEM SOLVING IN MATH, Grade 3
3 Apple II Diskettes, 32K.....$169.95

PROBLEM SOLVING IN MATH, Grade 4
4 Apple II Diskettes, 32K.....$169.95

PUZZLES AND PROBLEM SOLVING: ALGEBRA

(Tobbs Learns Algebra)

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K; Backup.....$55.00

"...what educational courseware ought to be...simulates thinking and encourages students to reason answers to problems. **InfoWorld, Vol. 5, No. 48.**

Develops students' algebraic thinking, hypothesis-making and -testing abilities and problem-solving skills. Varying skill levels. Beginning levels of the puzzles acquaint students with algebraic expressions. Higher levels use the same expressions but require students to work backwards to solve the problems. Students than proceed to special puzzle options that require them to figure out the appropriate algebraic formula after choosing numbers to be used. Teacher's guide.

QUATIONS

APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K.....$39.95

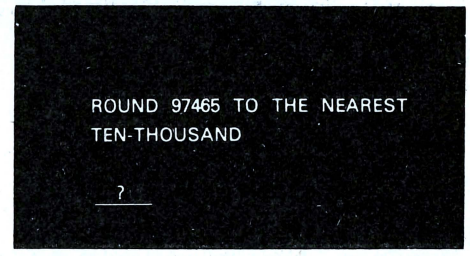
Players try to get the highest score by building equations with number and operation tiles, using as many in one turn as possible. Computer randomly deals seven number tiles and six operation tiles to each player. Players construct a vertical or horizontal equation that intersects with a number or operation tile already on the board. Reinforces basic math skills. Teacher's guide.

RATIOS AND PROPORTIONS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Worksheets.....$49.95

Excellent presentation of ratios and proportions including readiness skills, writing ratios in context, writing proportions in context, solving proportions, solving proportions in context, writing and solving proportions in context. Follow-up and reinforcement materials are contained in teacher's guide and accompanying tablet of reproducible worksheets and tests. *NOTE: Will not work on the Apple IIc.*

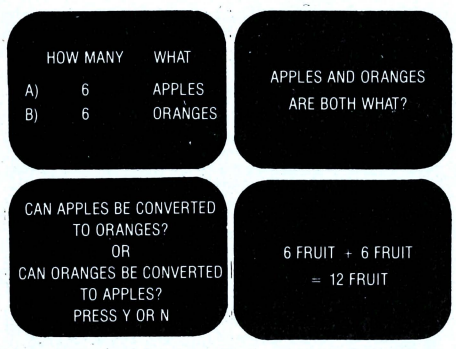


ROUNDING

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
1 Apple II Diskette, 48K; Backup.....$54.95

Provides highly interactive guided drill in rounding whole numbers and decimals, motivates students with an arcade-style game, gives teachers control over several aspects of the programs and includes a student management system. Students may choose from six lessons on whole numbers and four lessons on decimals. Numbers are randomly generated and students control the pace of presentation. Immediate reinforcement. If student scores a certain percentage, which may be adjusted by the teacher, they may choose to play a challenging arcade-style game. Teacher's guide.



SEMCALC: THE WORD PROBLEM SOLVER

APPLE II DISKETTE ■■■[I][J][H]■■

1 Apple II Diskette, 48K; Backup.....$95.00

Noted as Exemplary Math/Science Courseware in **Classroom Computer News, March 1983.** *Notable Software—1982-83,* **Electronic Learning.**

Helps students solve word problems by focusing on the units rather than the numbers. Helps students avoid inappropriate calculations by (1) stopping them from processing incompatible units; (2) helping them convert to common units; (3) leading them through the steps of making conversions between related units; (4) using "unit awareness" to help students determine the correct operation. Helps students decide which operation to use for a problem. Keeps notes on the processes that go into each computation; thus the student can see how an answer was reached and whether or not the units involved were renamed or converted. Users can also add their own notes for future reference, or can request help from a built-in tutorial. Teacher's guide.

SNOOPY TO THE RESCUE: ADDITION SKILLS

APPLE II DISKETTE ■■[P][I]■■■■

1 Apple II Diskette, 48K.....$39.95

Woodstock is missing! Birdnapped!! Help Snoopy climb each treacherous floor of Castle Danger. Then help him rescue Woodstock. Watch out for trap doors, moving floors, and most of all, the robot guards blocking your path. You'll need to be quick, as well as clever. The castle is boobytrapped with math challenges. Your knowledge of addition is the only thing that can help you and Snoopy survive. Joystick recommended. Increasingly difficult play and skill levels. Double-sided disk. User's guide.

Peanuts Characters: ® 1958, 1965. United Feature Syndicate

SOLVING EQUATIONS AND INEQUALITIES

(Discovering Algebra)

APPLE II DISKETTE ■■■■■[H]■■

1 Apple II Diskette, 48K; Backup.....$55.00

Builds skills in solving first-degree equations and inequalities by visually engaging students in balancing the equations. Students work with a scale and algebraic equations to decide how many coins are hidden in a bag. Begins with a simple scale, then shows how balance picture problems help solve equations and inequalities. Teacher's guide.

SOLVING WORD PROBLEMS SERIES

APPLE II DISKETTE ■■■[I]■■■■

Complete Series (2 Sets; 2 Diskettes).....$55.00

Story problems are presented with several different questions about each problem. Helps student to recognize and find several kinds of information within story problems. Teacher's guide with reproducible worksheets included.

SOLVING WORD PROBLEMS 1
1 Apple II Diskette, 48K, Worksheets.....$29.95
3rd, 4th, and 5th grade reading level.

SOLVING WORD PROBLEMS 2
1 Apple II Diskette, 48K; Worksheets.....$29.95
6th and 7th grade reading level.

SPACE MATH

APPLE II DISKETTE ■■[P][I]■■■■

1 Apple II Diskette, 48K.....$49.95

"...has a special flair that is not always seen in similar educational game software." **Personal Software, March 1984.**

As moonbase commanders, the players try to stop evil aliens of the planet Zorlyn from conquering Earth. Answering computation questions allows players to shoot at the Zorlyn's spaceships. This program generates a vast amount of possible addition, subtraction, multiplication, and division computations, bound by the parameters specified by the teacher. 1-6 players. Teacher's guide.

STICKYBEAR ARITHMETIC FUN

APPLE II DISKETTE ■■[P][I]■■■■

Bright, bouncy programs with lively eye-catching animation created by a popular children's illustrator. Hi-res graphics which move freely over color backgrounds...full-screen. full-color pictures.

STICKYBEAR MATH: ADDITION AND SUBTRACTION
1 Apple II Diskette, 48K; Poster; Stickers.....$39.95
"...beautifully designed programs that young children will enjoy." **InfoWorld, Vol. 5, No. 43.**
Now practice in addition and subtraction can mean adventure for kids. Every time youngsters get a set of problems right, they help get Stickybear out of one of 10 sticky situations. 20 levels, self-adjusting. User's guide; poster and stickers.

STICKYBEAR NUMBERS
1 Apple II Diskette, 48K; Book; Poster.....$39.95
Colorful groups of big moving objects – trucks, planes, birds, bears, more – teach numbers and counting for children age 3-6. Instruction guide and stickers.

STICKYBEAR SHAPES
1 Apple II Diskette, 48K; Book; Poster.....$39.95
Three colorfully-animated game activities in which the child either names a shape, picks a shape, or finds a shape. When the child makes a correct choice, the big, bright picture comes alive with colorful animation. Instruction guide and stickers.

STRATEGIES IN PROBLEM SOLVING SERIES: *See LOGIC, PROBLEM SOLVING, LEARNING GAMES*

SUCCESS WITH MATH SERIES

APPLE II DISKETTE ■■[P][I][J][H]■■

Students who want to get ahead in math -- or, students who want to catch up – will find these classroom-tested programs add up to positive results! Step-by-step tutor that actually communicates with children, pointing out errors, explaining rules, and complimenting students for a job well done. User's guide.

SUCCESS WITH MATH: ADDITION/SUBTRACTION
1 Apple II Diskette, 48K.....$24.95

SUCCESS WITH MATH: MULTIPLICATION/DIVISION
1 Apple II Diskette, 48K.....$24.95

SUCCESS WITH ALGEBRA: FIRST DEGREE AND ADVANCED LINEAR EQUATIONS (Grades 7-10)
1 Apple II Diskette, 48K.....$34.95

SUCCESS WITH ALGEBRA: SIMULATION EQUATIONS AND QUADRATIC EQUATIONS (Grades 8-11)
1 Apple II Diskette, 48K.....$34.95

TECMATH CALCULUS

APPLE II DISKETTE ■■■■■[H][C]■

Complete Series (4 Sets; 5 Diskettes).....$250.00

True tutorials with extensive use of graphics. Graphs may be printed, stored or viewed. Interactive material designed to increase student involvement and learning. Each set contains a 32 page workbook. In addition to the titles listed below, the complete series includes an extra utilities disk for teacher use. The disk contains compacted versions of all the graphing utilities without tutorial comment.

SUPERGRAPHER
1 Apple II Diskette, 48K; Workbook.....$60.00
Contains a graphing utilities which allows the user to input virtually any polynomial, rational, logarithmic, exponential or algebraic function and to obtain a well-proportioned graph. Allows graphing in rectangular or polar coordinates, or of parametric equations of two variables. Includes an interactive tutorial section. Examines and discusses many common families of functions encountered in a pre-calculus or calculus course.

DIFFERENTIATION
1 Apple II Diskette, 48K; Workbook.....$60.00
The graphing utilities enables the user to see the graph of his function (algebraic, exponential, logarithmic, rational or polynomial), and compare it to the graph of either its first or second derivative. Two tutorials, one on Max/Min and the other on Related Rates, develop insights and illustrate problem solving.

INTEGRATION
1 Apple II Diskette, 48K; Workbook.....$60.00
Contains utilities section for the graph of a function and its antiderivative, the Reimann Sum approximation to the area under a curve, and numerical integration. Allows input of any integrable function. Tutorial section discusses the mathematical theory, outlines and demonstrates methods of solution for common volume of revolution problems.

TAYLOR POLYNOMIAL APPROXIMATIONS
1 Apple II Diskette, 48K; Workbook.....$60.00
Gives a graphic illustration of how the Taylor polynomial (of up to degree 25) approximates any given function be it trigonometric, exponential, polynomial or logarithmic. Tutorial section develops and illustrates the idea of polynomial approximation to a given function with applied exercises and their solutions.

TELEMATH SERIES

APPLE II DISKETTE ■■■[P][I][J]■■■

Complete Series (10 Sets; 10 Diskettes).....$245.00

High quality arcade-style graphics and fun, competitive games make this math practice popular with students. Teachers appreciate the Award-winning, learning-validated content. Each game reinforces at least one basic math skill. Four games per disk with built-in teacher options. Games may be played against the computer or against other students, individually or as teams. Complete teacher's guide.

TELEMATH 1 *Grades 2,3*
1 Apple II Diskette, 48K.....$29.95
Sequencing numbers; addition practice.

TELEMATH 2 *Grades 3-6*
1 Apple II Diskette, 48K.....$29.95
Geometric shapes; subtraction practice; sequencing numbers.

TELEMATH 3 *Grades 3-6*
1 Apple II Diskette, 48K.....$29.95
Plotting points on a plane; identifying points, lines, line segments, rays and angles; changing money; measuring lengths to nearest whole, half, or quarter inch or centimeter.

TELEMATH 4 *Grades 4-6*
1 Apple II Diskette, 48K.....$29.95
Dividing and multiplying practice; computing volume of the rectangular prism.

TELEMATH 5 *Grades 3-6*
1 Apple II Diskette, 48K.....$29.95
Place value of decimals in tenths, hundredths, and thousandths; subtracting fractions; multipying and dividing practice.

TELEMATH 6 *Grades 5-7*
1 Apple II Diskette, 48K.....$29.95
Subtracting fractions and mixed numbers; parallelograms or right triangles; coverting fractions to decimals and vice versa; determining averages.

TELEMATH 7 *Grades 4-8*
1 Apple II Diskette, 48K.....$29.95
Multiplying fractions and mixed numbers; equivalent fractions; area of a rectangle; multiplying whole number and decimals.

TELEMATH 8 *Grades 4-8*
1 Apple II Diskette, 48K.....$29.95
Division with decimals; addition with decimals; converting fractions to percentages and vice versa; multiplying fractions and mixed numbers.

TELEMATH 9 *Grades 4-8*
1 Apple II Diskette, 48K.....$29.95
Subtracting fractions with unlike denominators; percentages; dividing with fractions and mixed numbers; subtracting mixed numbers with unlike denominators.

TELEMATH 10 *Grade 8*
1 Apple II Diskette, 48K.....$29.95
Dividing a 2-digit integer by a 1-digit factor with like or unlike signs; adding 2-digit integers; multiplication with like or unlike signs; subtracting 2-digit integers with like or unlike signs.

TRIG TUTOR

APPLE II DISKETTE ■■■■■[H][C]■

1 Apple II Diskette, 48K; Backup.....$45.00

Review and practice to help students learn trigonometry. Contains conscise definitions and explanations followed by a practice section. If the student does not know the answer to a question, he may ask for help and the computer will tell him the answer and explain to him the steps it took to get it. Keeps a running score. Notes.

TWO-STEP WORD PROBLEMS

APPLE II DISKETTE ■■■[I]■■■■

1 Apple II Diskette, 48K.....$35.00

Word problems involving two steps, using addition, subtraction, multiplication and division. Some decimals and fractions are included. Teacher's guide.

TELLING TIME

APPLE II DISKETTE ■■[P]■■■■■

1 Apple II Diskette, 48K.....$39.95

Combines guided drill in telling time, an arcade-style reward game, and student management. Choice of four lessons: (1) type digital time when shown clock face, (2) type digital time when given time in words, (3) set clock hands when given digital time, and (4) set clock hands when given time in words. Includes: hours, half-hours, quarter-hours and 5 minutes. Teacher's guide.

[S][E][P][I][J][H][C][A] LEVELS

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

TRAP-A-ZOID

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

Use geometry concepts to trap zoids from space. Practice geometry concepts while playing a game with colorful, lively animation and sound effects. Gain points by answering questions before the Zoid escapes. Includes concepts as basic as square and triangle and as complex as scalene and isosceles. Reinforcement for older students or challenge for younger students. Multiple skill levels. User's guide.

WHATSIT CORPORATION: SURVIVAL MATH SKILLS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$55.00

Real-life simulation of starting and running The Whatsit Corporation. Working together in small or classroom-size groups, students make decisions – size of sales force, amount of inventory, repayment of loans, price settting, advertising costs, record keeping, need for new capital and even unexpected business hassles such as late shipments and supply shortages. Competition between groups increases the challenge. Helps students use mathematics as an analytical tool in weighing variables, planning strategies and evaluating results in a real-life context. Teacher's guide with worksheets, answer key, masters for overhead transparencies and student activities.

WORD PROBLEM TUTOR SERIES

APPLE II DISKETTE I J

8 Apple II Diskettes, 48K.....$269.95

This step-by-step tutorial teaches students to solve word problems and, when appropriate, estimate answers. The computer guides the student with complete explanations for each step as s/he first selects the correct operation and then solves the problem. Each category contains 50 questions and provides practice in four ranges of difficulty. There are five questions in each round and correct answers earn points. A passing score permits the student to enter the next range. With the Question Writer you can easily change the questions on disks 1 through 7 to fit the needs of your class. Optional record management for 43 students. Teacher's guide.

WORD PROBLEM TUTOR: WHOLE NUMBERS - ADDITION AND SUBTRACTION
WORD PROBLEM TUTOR: WHOLE NUMBERS - MULTIPLICATION, DIVISION AND MIXED OPERATIONS
WORD PROBLEM TUTOR: FRACTIONS
WORD PROBLEM TUTOR: DECIMALS
WORD PROBLEM TUTOR: PERCENTS
WORD PROBLEM TUTOR: MIXED PRACTICE WHOLE NUMBERS
WORD PROBLEM TUTOR: MIXED PRACTICE FRACTIONS, DECIMALS AND PERCENT
WORD PROBLEM TUTOR: QUESTION WRITER AND GRADER

(Each title, 1 Apple II Diskette, 48K.....$34.95)

WORKSHEET WIZARD

APPLE II DISKETTE A

1 Apple II Diskette, 48K.....$39.95

Print a different, individualized math worksheet for every student in your class. Choose from five subject areas -- addition, subtraction, multiplication, division, and measurement – with up to eight levels of problems in each area. Every personalized worksheet includes student's name and a note of encouragement together with a teacher's answer key. No excuses for forgotten honework because the date due is printed on every assignment. Can be used to generate ditto masters. Requires printer. User's guide.

SCIENCE

ANATOMY/STRUCTURE-PROTOZA, WORM AND FROG

APPLE II DISKETTE I J

The anatomy of the frog or the common earthworm is displayed in computer graphics. Displays four representative organisms in the Protoza phylum: Amoeba, Euglena, Paramecium and the different anatomic structures and systems. When s/he is correct, the computer provides detailed information about each of the parts studied. Teacher's guide.

PROTOZOA
WORM
VISIFROG

(Each title, 1 Apple II Diskette, 48K.....$39.95)

See also: OPERATION: FROG

ANATOMY I

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

Contains 10 hi-res full color graphics dealing with human anatomy. Includes cell types, Digestive system, Circulatory System, Skeletal and more. Hundreds of questions test general knowledge. Use as a game, review and/or test preparation.

BAFFLES

APPLE II DISKETTE H C

1 Apple II Diskette, 48K.....$50.00

An interactive game designed to help students develop deductive reasoning and problem solving skills. To be successful at playing *Baffles,* students must use a method of scientific inquiry: they must discover systematic economic procedures for formulating, testing, and confirming hypotheses consistent with observations made during the game. Teacher's guide.

BALANCE IN NATURE

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$79.00

Tutorial programs and question geared for grades 5-8. Based on an underwater world of animated creatures where the living conditions vary. Includes: Food Chain, Adapting to the Environment, Species Change and Review. Extensive teacher's guide with activities and ideas.

BIOCHEMISTRY SERIES

APPLE II DISKETTE H C

Complete Series (5 Sets; 5 Diskettes).....$250.00

Tutorial programs suitable for advanced placement or upper level High School and first year College. Extensive use of color graphics and animation. Special type-in format provides more student interaction and serves as powerful reinforcement tool. Each set contains a study sheet and teacher's guide.

BIOCHEMISTRY: PROTEINS
1 Apple II Diskette, 48K; Study Sheet.....$60.00

Outlines the essential properties of proteins. Illustrates their primary structure (as related to function), shows globular vs fibrous proteins, and explains polymer formation. The student participates by using a typed-in command to construct an amino acid, change the "R" group, form a dipeptide and see the difference between denaturation and hydrolysis.

BIOCHEMISTRY: NUCLEIC ACIDS
1 Apple II Diskette, 48K; Study Sheet.....$60.00

Creative animation highlights the distinct features of nucleic acids. The DNA and RNA nucleotides are outlined and compared with special attention given to hydrogen-bond formation between purines and pyrimidines. Exceptional color graphics show the formation of a DNA helix.

BIOCHEMISTRY: LIPIDS
1 Apple II Diskette, 48K; Study Sheet.....$60.00

Animated graphic portrayals of both dehydration synthesis and hydrolysis, begins with the basic elements of lipids and shows their structural and functional differences. It compares saturated and unsaturated fats and depicts phospholipid structure.

BIOCHEMISTRY: CARBOHYDRATES
1 Apple II Diskette, 48K; Study Sheet.....$60.00

Presents the basics of carbohydrate structure and function with animation, color and sound. Illustrates fundamental differences between a triose, pentose, and hexose and compares the isomers of glucose. Student types in directions for: a condensation reaction between mono and disaccharides, the formation of polysaccharides, and a dramatic visual depiction of hydrolysis.

BIOCHEMISTRY TEST
1 Apple II Diskette, 48K.....$60.00

A comprehensive test which integrates the biochemistry unit and combines all four lessons. Multiple choice, true-false and matching questions. Measure recognition, comparison, contrast and application skills. Computer chooses questions randomly, continually updates the score, gives correct answers for incorrect responses, and allows the user to control the pace.

BIOLOGY ACHIEVEMENT SERIES

APPLE II DISKETTE H

From a bank of over 10,000 problems, these programs provide review and instruction in biology. The multiple choice format is similar to that used in the College Entrance Examination Board's Achievement Text in Biology. The student may select any category or combination of categories for review. All wrong answers are explained. A full analysis of the student's responses is given at the end of each session. One option allows teachers to print hardcopy tests on any area or combination of areas. Ideal for review or for preparing students for a variety of tests in Biology. Approximate achievement score available. Backup; Teacher's guide.

Note: to utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.

BIOLOGY ACHIEVEMENT 1: CELL AND TISSUES
1 Apple II Diskette, 48K; Backup.....$49.95

Topics covered include instruments used to study cells and tissues, organells, cellular transport processes, cell theory, biochemistry, respiration, photosynthesis, animal tissues and plant tissues.

S E P I J H C A **LEVELS**

S - Special Needs
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J - Junior High
H - High School
C - College
A - Adult

BIOLOGY

APPLE II DISKETTE H

8 Apple II Diskettes (15 Programs), 48K.....$250.00

For review and reinforcement of Biology topics. Format is: question...information if needed...more information if needed. Uses latest brancing techniques and brances to questions in sub-program on any concept with which student has difficulty. Student names and grades are stored for teacher use. Numerous high resolution graphics for such things as cells, nerves, charts and graphs. Teacher's guides. Please give program title when ordering.

Each title contains: 1 Apple II Diskette, 48K and a Teacher's Guide. Price per title.....$28.00

ANIMAL REPRODUCTION.....$28.00
Emphasizes the development of the sperm, egg, and the fertilized egg.

ASEXUAL REPRODUCTION.....$28.00
Emphasis is on mitosis and meiosis. Includes asexual reproduction in simple organisms.

BIOCHEMISTRY.....$28.00
Reviews basic atomic structure, balancing equations, and properties of proteins and carbohydrates.

CELLS.....$28.00
Questions and information on cell theory, cell structures, single celled organisms, and the difference between animal and plant cells.

CLASSIFICATION.....$28.00
Reviews the organization of living things.

DIGESTION.....$28.00
Questions deal with nutrients, digestion in simple organisms, and the digestive process in humans.

ENDOCRINE SYSTEM.....$28.00
Emphasizes hormones that are secreted by the ductless glands, the effects of these hormones, and some of the problems that may develop when too little or too much hormone is produced.

EXCRETION.....$28.00
Reviews the nature of metabolic wastes, how wastes are removed in some simple organisms and how the kidneys function in humans.

GENETICS.....$28.00
Questions and background information on results from various crosses on peas, four o'clocks, and fruit flies. Also material on sex-linked diseases.

LOCOMOTION.....$28.00
Reviews the function of bones and muscles as well as the topics of types of muscles and joints.

NERVOUS SYSTEM.....$28.00
The nature of a nervous impulse, nerve impulses in simple organisms, reflexes, and the chemicals involved in the transfer of impulses.

PHOTOSYNTHESIS AND TRANSPORT.....$28.00
Gives students better understanding of photosynthesis, the transport system of plants, and the function of various kinds of plant cells.

REPRODUCTION PLANTS.....$28.00
Includes asexual reproduction and sexual reproduction in plants. Strong emphasis on processes that take place within the flower.

RESPIRATION.....$28.00
Questions cover the process of cellular respiration, the structures that are involved, and the chemistry of the process.

TRANSPORT.....$28.00
Reviews the blood system, the lymph system, blood cells, and blood types.

BIOLOGY DISSECTION LABS

APPLE II DISKETTE J H

Prepares biology students for actual dissecting by taking them through the procedure step-by-step on the computer screen. Color pictures show the dissection steps and teach the names and functions of all the internal parts. Each part can be used three ways. First, it can present the vocabulary giving the definitions and functions of the body structures together with pictures. Second, it can be used to go through a step-by-step dissection with all the safety warnings and techniques. Finally, it can be used after a dissection as a self-test. About 50 to 100 questions are included with each dissection guide.

EARTHWORM DISSECTION
FROG DISSECTION
GRASSHOPPER DISSECTION
CRAYFISH DISSECTION
STARFISH DISSECTION
CLAM DISSECTION
PERCH DISSECTION

(Each title, 1 Apple II Diskette, 48K; Guide.....$30.00)

BIOLOGY GRAPHICS REVIEW: PROTOZOANS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$40.00

Shows your students full-color Hi-Resolution graphics of Amoeba, Euglena, and Paramecium. Includes review screens of 18 important biological terms.Includes four activities in which students match names, pictures, functions and written descriptions using text and graphics. Programs include: Match It!, Name It!, Associations, Vocabulary Review. Teacher's guide.

BIOLOGY QUIZ SERIES

APPLE II DISKETTE J H

Complete Series (5 Sets; 5 Diskettes).....$105.00
Each set contains 400 questions and answers, arranged by topic in multiple choice, true/false, fill-in and short answer format. Two games are included on each disk. Immediate feedback and opportunity to review. User's guide.

BIOLOGY QUIZ 1
1 Apple II Diskette, 32K.....$27.00
Life, Cells, Tissues, Body Organs, Skeletal System, Blood and Circulatory System, Muscles, Respiratory System, Digestive System, Endocrine System, Integumentary System, Reproductive System, Excretory System.

BIOLOGY QUIZ 2
1 Apple II Diskette, 32K.....$27.00
Coelenterates, Echinoderms, Worms, Mollusks, Arthropods, Insects, Fish, Amphibians, Reptiles.

BIOLOGY QUIZ 3
1 Apple II Diskette, 32K.....$27.00
Birds, Mammals, Primates, Taxonomic Zoology, Protists, Bacteria.

BIOLOGY QUIZ 4
1 Apple II Diskette, 32K.....$27.00
Plant Anatomy and Physiology, Photosynthesis, Plant Reproduction, Taxonomic Botany, Plant Ecology.

BIOLOGY QUIZ 5
1 Apple II Diskette, 32K.....$27.00
Evolution, Genetics, Reproduction, History of Biology, Ecology.

BIOLOGY SOFTWARE

APPLE II DISKETTE J H

Increases students' mastery of important Biology concepts by providing an interactive format that stimulates creative thinking, problem-solving and factual recall. Reviews and reinforces study of enzymes, photosynthesis and DNA. Includes short-answer questions requiring student-supplied words, numbers of sequences, multiple choice questions, discovery of error, lab simulations and models of processes. Answering the questions requires factual knowledge, problem solving, and ability to collect data and interpret it with the use of graphs. The subject matter of each program assumes that the student has been exposed to the topic in a first-year biology course. Incorrect answers elicit extra help. The computer's random function maximizes the variety of ways in which questions are posed. Thus, repeated runs of the program are instructive and reinforcing rather than boring and repetitive. Student summary provided at end of each part. Teacher's guide with each set.

DNA: THE GENETIC CODE
1 Apple II Diskette, 48K; Backup.....$119.00
Includes: DNA: Structure and Replication and DNA: Mechanism of Protein Synthesis.

PHOTOSYNTHESIS
1 Apple II Diskette, 48K; Backup.....$119.00
Includes: The Light Reaction and The Dark Reaction.

ENZYMES
1 Apple II Diskette, 48K; Backup.....$119.00
Includes: Structure and Function and The Effects of Temperature on Enzyme Activity: A Laboratory Simulation.

BIOLOGY TEST MAKER

APPLE II DISKETTE A

4 Apple II Diskettes, 48K.....$85.00
Enables the biology teacher to make quizzes and tests of any size from a bank of about 900 multiple choice questions on 4 disks. Tests can be saved on copyable disks. Teacher can add his/her own questions. Questions can be added to and deleted at any time, can be printed in normal or reverse order, and can be previewed on the screen or on paper before being chosen for the test. Test bank questions include: Living Things, Genetics, Biochemistry, Diversity, Animals and Plants, Ecology, Reproduction, and Physiology. Teacher's guide. *NOTE: To utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.*

BODY TRANSPARENT

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$44.95
Learn the organs and bones of the human body in a fun and challenging game. Move the bones and organs presented to their correct locations on the male or female body. Or play the game of facts and functions and learn what different organs and bones do and other important information about them, as well as where they are. The *Body Transparent* even lets you add your own human biology questions. An entertaining game teaches the names, locations and functions of organs and bones of the human body, plus important facts about them. Allows teachers to add their own questions and vary the difficulty levels of game play and anatomy skills independently. User's guide.

CHEMAID

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.95
Presents the elements of the periodic table according to their symbol, classification and position on the chart. Includes an Element Recognition Game and a Data Retrieval Utility. Color graphics. Includes basic facts about each of the elements. Teacher's guide.

BODY SYSTEMS

APPLE II DISKETTE P I

4 Apple II Diskettes, 48K.....$135.00
Colorful graphics, optional sound, complete documentation, simple for the student to run. Highly inter-active, requiring frequent student response. Optional dictionary of new terms, and several mini-quizzes included on each disk. Designed to be used alone as individual lesson; however, when using the complete series, most effective to run the disks in order, as the terms and concepts build sequentially, reinforcing learning. Automatically branches to remedial instruction written at a lower reading level where needed. Teacher's guide.

Respiratory System: A Puff of Air - Important everday act of breathing comes to life as the computer creates a picture of air and names it "Puff". "Puff" takes the students with him as he travels through the body -- in the nose, down the windpipe and in and out of the lungs.

Digestive System: The Dissappearing Dinner - Stanley the Stomach shows the students what happens to the food they eat -- how it begins to be broken down when they chew with their teeth and how the small intestine finally makes most of it usable to the rest of the body.

Bones and Muscles: A Team to Depend On - "Femur", as the ancient bone, explains the way bones and muscles work together as a team to help people stand up, run and play. Participative quizzes.

Heart: A Mighty Pump - Follow a red blood cell on its journey through the four chambers of the heart and the circulatory system. Functions of the heart are made clear and interesting through graphics and inter-active exercises. Emphasis is on care of the heart.

(Each title, 1 Apple II Diskette, 48K.....$39.95)

CARDIOVASCULAR FITNESS LAB

APPLE II DISKETTE H C A

1 Apple II Diskette, 48K; Heart Rate Sensor; Interface Box.....$165.00
Provides students and other users with everything they need in order to use the microcomputer to monitor cardiovascular activity. Has a wide variety of applications in health classes, physical education, biology, and psychology. Students can investigate the difference between people who exercise and those who do not or smokers and non-smokers. The program can also print out heart rate information for future reference and comparison. Teacher's guide.

CELL RESPIRATION SERIES

APPLE II DISKETTE H C

CELL RESPIRATION: BASIC
3 Apple II Diskettes, 48K; Study Sheets.....$130.00
Tutorial unit for high school and junior college levels. Features comprehensive discussion of ATP-ADP, oxidation/reduction and carrier molecules. Animated color graphics clearly illustrate the aerobic and anaerobic pathways: glycolysis and others. A special type-in format involves the student with the lesson and prevents non-interactive response. User controls the pace. Teacher's guide.

CELL RESPIRATION: ADVANCED
5 Apple II Diskettes, 48K; Study Sheets.....$250.00
For high school honors, advanced placement and college biology. An integrated lesson on the chemical pathways for aerobic and anerobic respiration. Extensive animation and color graphics.

CHEMICAL ELEMENTS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.95
A great way to learn and remember characteristics of the *Chemical Elements.* Students select a series of "clues" which help them decipher the right element. Students may "play" at different levels of difficulty by choosing simple or more complex "clues". There are 45 different elements, each with 15 different clues. Students can play against themselves or challenge other students. The clues cover critical information that every first year chemistry student needs to know. Clue lists can be printed for the students to study. All clues and point values are easily modifiable. Record keeping. Teacher's guide.

CHEMICAL NOMENCLATURE AND BALANCING EQUATIONS

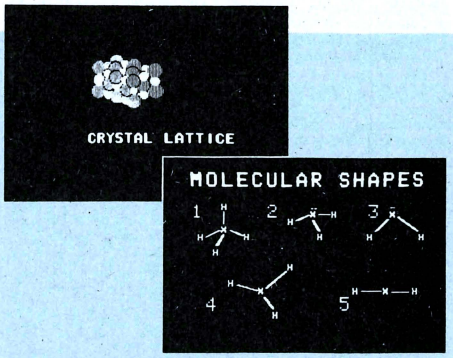
APPLE II DISKETTE H

2 Apple II Diskettes, 48K.....$169.00
Features a tutorial and a drill-and-practice program. Program stands alone and is ideal for any high school level chemistry course. Includes: **Chemical Nomenclature and Balancing Equations—Tutorial** - Details formula writing, subscripts in chemical compounds, parenthesis; Formula naming, using the stock system of nomenclature; Oxidation charts are shown; Balancing equations, step-by-step examples, determining coefficients. **Chemical Nomenclature and Balancing Equations—Practice** - Gives students over 600 different formulas to practice writing, naming, balancing. Complete edit features. Teacher's guide.

CHEMICAL PRINCIPLES FOR THE INTRODUCTORY LABORATORY

APPLE II DISKETTE H C

1 Apple II Diskette, 48K.....$75.00
Includes five topics normally covered in general chemistry: chemical equilibrium, acid titration, formation constants, reaction rates, and Beer's Law. Programs illustrate the principles and methods involved in each area and offer students a series of practice exercises. In all but one of the programs, students may also select to work with an unknown, which is then automatically graded. The programs should follow a lecture or textbook presentation of the subject matter and may be used to prepare students for subsequent laboratory work. Instructor's notes.



CHEMISTRY

APPLE II DISKETTE H

5 Apple II Diskettes (15 programs), 48K.....$250.00
Designed to review and reinforce chemistry concepts. Contains high resolution graphs, charts and diagrams. Names and grades can be stored on disk file. Teacher's guide. Please give program title when ordering.

Each title contains: 1 Apple II Diskette, 48K and a Teachers Guide. Price per title.....$28.00

PERIODIC TABLE.....$28.00
Formulas, atomic radius, mass number, ionization energy, activity, combining capacity, and the number and type of each type of particle in an atom.

ELECTRON STRUCTURE.....$28.00
Orbitals, valence electrons, electron structure, filling of sublevels and the relationship of valence electrons to the periodic table.

OXIDATION REDUCTION.....$28.00
Reviews oxidation numbers, half reactions, balancing oxidation reduction reactions and determining the number of electrons lost and gained.

ACID BASE THEORIES (Acids).....$28.00
Exercises on Bronsted Lowry theory, naming acids, neutralization reactions and salts.

SOLUTIONS.....$28.00
Students practice and learn naming, ion concentration, molartiy, calorie problems, and the formation of precipitates.

BONDING BETWEEN MOLECULES.....$28.00
Practice with concepts related to hybridization, shapes of molecules Van der Waals forces, and network bonds.

GAS RELATIONSHIPS.....$28.00
Boyle's Law, Charles's Law, partial pressure, volume-volume equation relationships, weight-volume equation problems and densities of gases.

MOLES AND FORMULAS.....$28.00
Converting grams to moles, number of molecules to moles, Avogardro's relationship and percent compostion.

ELECTROCHEMICAL CELLS.....$28.00
Questions pick random variables for problems on electrochemical cells, voltages, oxidizing and reducing agents in cells, and the direction of both electron flow and ion flow.

ORGANIC CHEMISTRY.....$28.00
Questions on identifying isomers, names of simple hydrocarbons and their isomers, functional groups, and some types of reactions are asked.

ACID BASE PROBLEMS (PH of Solutions).....$28.00
Students are asked questions dealing with pH, titration problems, dilution of acids and the neutralization of solid bases.

KINETICS.....$28.00
Practice with problems covering the topics of reaction rates, collision theory, heat of reaction, and activation energy.

CHEMICAL EQUATIONS.....$28.00
Practice with balancing equations, mole relationships in equations and weight-weight problems.

EQUILIBRIUM.....$28.00
Review of Le Chatelier's principle, calculating the equilibrium constant and relating Ksp to solubility of a compound.

BONDING IN MOLECULES.....$28.00
Besides covalent and ionic bonding, students practice on problems covering bonding properties, and the relationship of bonding to the periodic table.

CHEMISTRY QUIZ SERIES

APPLE II DISKETTE [H]

Complete Series (2 Sets; 2 Diskettes).....$54.00
Each set contains 400 questions and answers, arranged by topic, in multiple choice, true/false, fill-in and short answer format. Two games are included on each disk. Immediate feedback and opportunity for review. User's guide.

CHEMISTRY QUIZ 1
1 Apple II Diskette, 32K.....$27.00
Periodic Table and Elements; Chemical Compounds; Acid, Bases, and Salts; Cehmical Bonds; Solutions and Suspensions; Ions.

CHEMISTRY QUIZ 2
1 Apple II Diskette, 32K.....$27.00
Chemistry History, Chemical Laws and Theories, Atomic and Molecular Structure, Chemical and Physical Changes, Metals, Gases, Crystallography, Electrolysis, Organic Chemistry, Distillation, Halogens, Hydrates, Mixtures.

CHEMISTRY TEST MAKER

APPLE II DISKETTE [A]

4 Apple II Diskettes, 48K.....$85.00
Enables the chemistry teacher to make quizzes and tests of any size from a bank of about 750 multiple choice questions of 4 disks. Tests can be saved on copyable disks. Teacher can add his/her own questions to the test bank. Questions can be added to and deleted at any time. Test questions can be printed in normal or reverse order. Questions can be previewed on the screen or on paper before being chosen for the test. Test bank questions include: Matter and Energy, Stoichiometry, Kinetics, Equilibrium, Atomic Structure, Acids and Bases, Bonding, Periodic Table, Reduction-Reduction, and Organic Chemistry. Teacher's guide. *NOTE: To utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.*

CHEMISTRY TUTOR: STOICHIOMETRY

APPLE II DISKETTE [H][C]

2 Apple II Diskettes, 48K; Backup.....$75.00
Now, interactive dialogs that mimic student/instructor tutorial to help your students develop cumulative skills needed to do well in chemistry. Helps chemistry students learn how to balance equations in careful, step-by-step detail. The program's superb flexibility gives specific responses to any answer a student gives, no matter how close or off-base that answer may be. It instantly recognizes where the problem lies, and asks questions that lead students back on the right track to the right answer. Helps students perform core tasks in stoichiometry by breaking down problems into steps your students can comfortably handle. Program contents: Stoichiometry; Balancing Equations; Simple Stoichiometry; Limiting Reagents. Teacher's guide.

COMPUTER AIDED INSTRUCTION FOR GENERAL CHEMISTRY

APPLE II DISKETTE [H][C]

4 Apple II Diskettes, 48K; Backup.....$200.00
A comprehensive instruction in general chemistry designed as a course supplement. Students can review important chemical principles at their own pace...and zero-in on areas where they're having difficulty. From 50 to 75 drills, exercises, and problems per program. Covers every major topic in undergraduate general chemistry. Programs are designed to be as interactive as possible while minimizing straight text materials. Menu driven. Gives students the freedom to move easily through the material, at a pace they're comfortable with. Each menu item may be started at any time and repeated as many times as necessary. The questions within each section are generated randomly, creating a new set of problems each time a section is worked. Teacher's guide.

CONCENTRATED PHYSICS CONCEPTS: MECHANICS

APPLE II DISKETTE [H][C]

3 Apple II Diskettes, 48K; Backup.....$150.00
These programs offer one-on-one self-paced tutorial computer instruction for students. Various types of physical situations and concepts are introduced. The programs present problems of increasing difficulty, and responses are checked for accuracy, proper units and an appropriate number of significant figures. When an incorrect response is entered, the student is assisted to discover the correct method of solving the problem through interactive remediation. This reinforces good problem-solving techniques. Where appropriate, problems are illustrated by graphic demonstrations. Allows instructor to select page references for any of the Halliday and Resnick or Kane and Sternheim physics texts, or to select generic topic headings. Options to turn, limit sound; select trigonometry or calculus based course; and monitor the progress of a class. Also offers a review mode illustrating all the different kinds of questions that a particular program can ask. Program contents: Conversion of Units; Significant Figures; Vectors; Trigonometry Review; Motion in One Dimension; Projectile Motion; Particle Dynamics; Work and Energy; Conservation of Energy; Center of Mass; Collisions; Rotational Dynamics. Documentation included.

CONCEPTS IN STATIC ELECTRICITY

APPLE II DISKETTE [J][H]

1 Apple II Diskette, 48K; Backup.....$90.00
Covers The Electroscope, Charging by Induction, Grounding, and Charging by Conduction. Uses graphic representations of an electroscope to teach the basics of the behavior of charged objects under varying circumstances. Attention is given to the gain, loss, and transfer of charges, by varying methods, and under differing circumstances. Each disk contains a tutorial section accompanied by color, hi-res graphics, and a self test. Designed for self-paced, interactive learning with frequent self-evalution and immediate positive reinforcement. Backup; teacher's guide.

CONCENTRATED CHEMICAL CONCEPTS SERIES

APPLE II DISKETTE [H][C]

Complete Series (3 Sets; 9 Diskettes); Backups.....$450.00
"Well researched and thorough and comprehensive. Compared to other software I've examined, this is far superior." **Marlene Spero, Loretto Heights College.**

This package of drill-and-practice programs and simulations covers the entire introductory course in general, organic, and biological chemistry for students planning careers in health professions. Makes chemistry easier for the non-major - and makes study and review more effective - through simulations, problem solving drills, term and definition matches, and a special nomenclature drill. Backups; complete documentation.

CONCENTRATED CHEMICAL CONCEPTS: GENERAL CHEMISTRY
4 Apple II Diskettes, 48K; Backup.....$200.00
Contents: Definitions: Measurements, Common SI Prefixes, Significant Figures, Conversion of Units, Temperature Conversion, Density Problems, Definitions: Matter and Energy, Name and Symbol of Elements, Definitions: Atoms and Elements, Composition of Atoms. Electron Configurations of Atoms, Areas of the Periodic Table, Definitions: Compunds and Moles, Names and Formulas of Simple Ions, Electron Configurations of Ions, Names of Ionic Compounds, Formulas of Ionic Compounds, Names and Formulas of Polyatomic Ions, Balancing Chemical Reactions, Formula Weights, Calculations with Moles. Definitions: Gases and Kinetic Theory, Boyle's Law Demonstration, Gas Calculations - P/V and V/T, Definitions: Solutions and Colloids, Molarity Calculations, Definitions: Ion-Producing Substances; Names and Formulas of Acids and Bases, Conjugate Acids and Bases, Strengths of Acids and Bases. Solubilities of Salts, Definitions: Acidity, Values of pH, Hydrolysis of Salts, Equivalent Weights, Definitions: Elements in Living Systems, Names and Symbols of Essential Elements, Definitions: Radioactive, Elements.

CONCENTRATED CHEMICAL CONCEPTS: ORGANIC CHEMISTRY
3 Apple II Diskettes, 48K; Backup.....$150.00
Definitions: Organic Chemistry, Writing Condensed Structures, Recognizing Isomers, Important Families of Compounds, Definitions: Saturated Hydrocarbons, Names of Linear Alkans, Structures with Rings, Names of Branched Alkanes. Definitions: Unsaturated Hydrocarbons, Names of Alkenes, Reactions of Hydrocarbons, Names of Benzene Derivatives, Definitions and Names of Alcohols and Realted Compunds, Definitions and Names of Aldehydes and Ketones, Reactions of Aldehydes and Ketones. Definitions, Names and Reactions of Carboxylic Acids and Esters, Definitions: Amines and Amides, Names Amines, Definitions: Optical Isomerism, Recognizing Optical Isomers.

CONCENTRATED CHEMICAL CONCEPTS: BIOLOGICAL CHEMISTRY
2 Apple II Diskettes, 48K; Backup.....$100.00
Definitions: Carbohydrates, Lipids, Proteins, Nucleic Acids; Recognizing Glucose and Its Isomers; Names and Symbols of Amino Acids; Hydrolysis of Tripeptides; DNA and RNA Base Pairing. Reading the Codon Table; Defintions: Nutrition, Enzymes and Hormones, Body Fluids, Biochemical Energetics, Metabolism of Carbohydrates, Metabolism of Lipids, Metabolism of Proteins; Acidosis and Alkalosis.

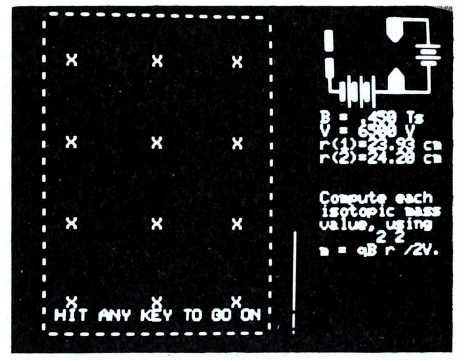
DINOSAUR DIG

APPLE II DISKETTE [I]

1 Apple II Diskette, 48K.....$47.50
Endorsed for its excellence. **Smithsonian Institution.**
An electronic journey back into geologic time during which kids explore and learn all about dinosaurs, from where they lived to why they died. Includes time line game in which kids learn which dinosaurs lived when. Comes with Easy Key overlay which converts the keyboard to a series of function keys. Teacher's guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs	**J** - Junior High
E - Early Learning	**H** - High School
P - Primary Grades	**C** - College
I - Intermediate Grades	**A** - Adult



DEMOCOMP PHYSICS

APPLE II DISKETTE [H]

Complete Series (9 Diskettes, 25 Programs).....$599.00
Make the most of your physics instruction - even when hardware is limited. These Physics programs are designed to simulate experiments and demonstrations at the touch of a button.

For example: Instead of drawing illustrations on the blackboard to explain refraction, teachers now have at hand a vast range of simulations of light rays passing through semicircular, rectangular and triangular media. To demonstrate kinetic theory, a dynamic model of helium molecules bounce around inside a box and the user specifies temperature, volume of box, and number of molecules (up to 128). Then the molecules are shown in high-speed graphics making a click every time they bounce off a wall. The cumulative noise of these impacts is an indicator of gas pressure. All variables can be quickly altered to show the effects of each on the pressure of the box.

These programs feature extensive use of high resolution graphics and combine interaction-oriented instruction with highly effective visual medium. Interdisciplinary applications allow for use throughout your school's science department.

Randomly generated practice problems are provided in cases where they will help students master the principles involved. Teacher's guide.

DATAGRAPH
1 Apple II Diskette, 48K; Backup.....$39.00
Demonstrates the ideas of best-fit straight line; linear correlation; and graph analysis.

UNCERTAINTIES
1 Apple II Diskette, 48K; Backup.....$29.00
Meaning of uncertainty in measurements; Demonstrates the coumpounding of margin of measurement error for addition, subtraction, multiplication, and division.

VECTORS AND LINEAR MOTION
1 Apple II Diskette, 48K; Backup.....$99.00
Vector Addition; Navigator; Inclined Plane; Collisions: Elastic/ Inelastic.

NONLINEAR MOTION
1 Apple II Diskette, 48K; Backup.....$89.00
Cannon Shot; Angular Momentum; Orbital Motion; Circular and Simple Harmonic Motion.

VIBRATION AND WAVE MOTION
1 Apple II Diskette, 48K; Backup.....$99.00
Pendulum Analysis; Ripple Tank; Wave Form Addition: Fourier Series.

HEAT ENERGY
1 Apple II Diskette, 48K; Backup.....$59.00
Kinetic Molecular Theory; Energy Conversion Electrical to Heat.

ELECTRICITY AND ELECTROMAGNETIC RADIATION
1 Apple II Diskette, 48K; Backup.....$79.00
DC Circuits; Electric Fields; Magnetic Fields.

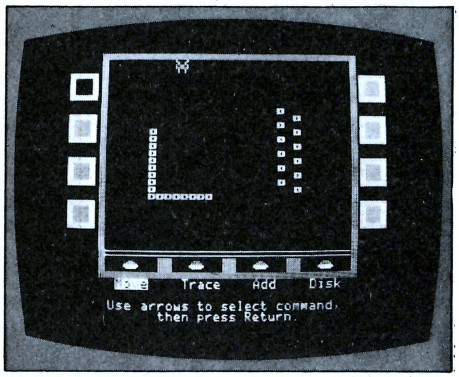
OPTICS AND LIGHT
1 Apple II Diskette, 48K; Backup.....$79.00
Lenses; Refraction.

ATOMS AND MATTER
1 Apple II Diskette, 48K; Backup.....$99.00
Mass Spectrometer; Radioactive Decay; Alpha Particle Scattering; Black Body Radiation.

DINOSAUR ZOO

APPLE II DISKETTE [P][I]

2 Apple II Diskettes, 48K.....$53.00
Outstanding Software Award, 1984, **Creative Computing.**
High-resolution graphics illustrate a time line of animal evolution. 500,000,000 years of life on earth are compressed into four minutes. More graphics are used to explain how scientists have learned about dinosaurs by studying their fossil remains. Thirteen dinosaurs are considered in detail through simple questions and a trip to the Dinosaur Zoo. Includes: Animal Time Line, Fossils, Early Dinosaurs, Huge Dinosaurs and Dinosaurs with Armor. Teacher's guide.



DISCOVER

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$55.00

You are a top level scientist. A recent space probe has brought back several new creatures. You must keep the life forms alive as long as possible. You unfreeze them one at a time and set up experiments to collect data on that creature. Your success depends on your ability to form and test hypotheses and collect data. Designed to teach students to collect data and draw conclusions; to formulate hypotheses; establish all parameters of an experiment. Backup; teacher's guide.

DISCOVERY LAB

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$44.00

Introduces students to science processes, and specifically to observation, experimental design, and hypothesis testing. Students are challenged to design experiments in order to determine the characteristics of imaginary mystery organisms. The package contains three separate labs of varying difficulty. As student progress through the labs they must control more variables and analyze increasingly complex organisms. Each lab contains a graphical chamber where the students may design and run their experiments. Students study the characteristics of an organism by altering the conditions (variables) in the chamber. Students learn by testing and by observing an organism's behavior under different conditions. Students may continue to design experiments in the chamber until they are satisfied that they have discovered the behavior patterns. The final results are analyzed and compared to the actual characteristics of the organism. Possible redesigns of the experiments are suggested when the students' findings do not match the organism's true characteristics. Teacher's guide.

DISCOVERING THE SCIENTIFIC METHOD

(Snigs...Flirk...Blorgs)

APPLE II DISKETTE J

1 Apple II Diskette, 48K; Backup.....$49.00

Don't just teach the scientific method...let your students practice it! This program will help your students to understand what a hypothesis is, how to analyze their observations, how to organize their data into simple categories and record the results of "experiments", how to draw conclusions from their conclusions. Includes tutorial and practice problems. Backup; teacher's guide.

DO YOU SEE HOW I SEE

APPLE II DISKETTE I J

2 Apple II Diskettes, 48K.....$95.00
2 Apple II Diskettes, 48K; Backup.....$110.00

A concise step by step approach teaches the operation of the 5 senses. Students feel sound vibrations, hear a variety of interesting noises, and see the actual process of image formation on the Retina. Teacher's guide.

EARTH SCIENCE

(Skies Above/Water Below)

APPLE II DISKETTE J

4 Apple II Diskettes, 48K.....$115.00

Introduces your students to the world of Physical Science in an exciting and effective manner. Colorful graphic simulations are used to depict a series of fascinating voyages ranging from the planets and stars of outer space to the waterways of Earth. Students learn basic facts and vocabulary about the areas they explore through the use of dynamic and exciting drill techniques. Each program includes a testing section and a student management system. Teacher's guide each program.

Planets
Stars
Streams and Rivers
Oceans

(Each title, 1 Apple II Diskette.....$29.95)

EARTH SCIENCE QUIZ

APPLE II DISKETTE J H

Complete Series (4 Sets; 4 Diskettes).....$84.00

Each set contains 400 questions and answers, arranged by topic, and in multiple choice, true/false, fill-in, and short answer formats. Two games are included on each disk. Immediate feedback and opportunity to review. User's guide.

ASTRONOMY QUIZ
1 Apple II Diskette, 32K.....$27.00
Astronomy History, Stars and Planets, Moon and Sun, Eclipses, Universe, Astronomical Theories, Gravity, Stellar Spectroscopy, Space Programs.

GEOLOGY QUIZ 1
1 Apple II Diskette, 32K.....$27.00
Geology History and Theories, Geologic Time, Paleontology, Earth's Crust and Interior, Earthquakes, Volcanoes, Glaciers.

GEOLOGY QUIZ 2
1 Apple II Diskette, 32K.....$27.00
Mineralogy and Petrology, Igneous Rocks, Sedimentary Rocks, Metamorphic Rocks, Sedimentation and Speleology, Soils and Stratigraphy, Weathering and Erosion, Hydrology, Ores.

METEOROLOGY QUIZ
1 Apple II Diskette, 32k.....$27.00
Atmosphere, Temperature and Pressure, Wind, Clouds and Humidity, Fronts and Air Masses, Seasons and Climates, Weather Instruments, Storms and precipitation.

EARTH SCIENCE SERIES

APPLE II DISKETTE J H

EARTH SCIENCE: 12 PROGRAMS
6 Apple II Diskettes, 48K.....$195.00

Reviews and teaches the main concepts in each science area. Uses numerous high resolution graphics in each program. Each program takes about 40 minutes to complete. Contains two teacher utilities to keep track of student progress and enable the teacher to easily change any of the content. Utilizes the latest branching technique to give extra help as needed. Program lessons includes:

Earth History
Earth Motion
Energy Flow
Erosion
Measuring the Earth
Minerals and Rocks
Observations and Measurements
Restless Earth
Solar Radiation
Oceans: Earth Science
Water
Weather: Earth Science

(Each title, 1 Apple II Diskette, 48K.....$29.00)

EARTH SCIENCE TEST MAKER
4 Apple II Diskettes, 48K.....$85.00

Contains a bank of more than 600 questions. Generates any size test. Add your own questions to the test bank. Mix questions from different units on the same test. Tests can be saved on copyable disks. Prints 80 characters per line on paper. Print both test and answer sheet. Print in normal or reverse order. Covers the entire Earth Science course. *NOTE: to utilize the special features of the Apple IIe/IIc with this program, please specify the Apple IIe or IIc version when ordering.*

ECOLOGY, ASTRONOMY AND ARITHMETIC

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Backup.....$49.00

Math practice and science simulations. **Estimate** is a drill and practice program on estimating problems in addition, subtraction, multiplication, division, and percents. **Math Game** provides drill and practice on the four basic math operations. **Odell Lake** simulates a typical food web found in lakes in North America. **Solar Distance** teaches concepts of distance in astronomy by having students make trips to planets using various methods of transportation. Finally, **Ursa** is a tutorial on northern hemisphere constellations, including a section on telling time by using the stars. Teacher's guide.

ELECTRON PROPERTIES

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Backup.....$39.95

A series of programs for the high school and junior college chemistry student with a minimal background in the topic. The student begins the program by taking the overview lesson. Based on the results of this lesson the student is given an individual lesson plan. The lesson plan might require the student to use any of the following sections: Basic electron properties, energy levels, filling orbitals and sublevels, and electron configuration. Throughout each lesson the student is given questions to determine whether or not he/she needs to review the material just covered. Concludes with test. Numerous graphics. Teacher's guide.

ENZYME INVESTIGATIONS

APPLE II DISKETTE J H C

1 Apple II Diskette, 48K; Backup.....$59.00

Provides students with a highly interactive introduction to enzymes including a tutorial that introduces the key concepts; laboratory simulations that allow students to investigate factors affecting how enzymes function; a game in which students must choose the right enzymes to "digest" different types of food; and an exercise in which students must identify "mystery" enzymes. Each section may be used independently. Backup; teacher's guide.

EXPERIMENTS IN CHEMISTRY

APPLE II DISKETTE H C

1 Apple II Diskette, 64K; Backup; Interface box, Probes, pH/mV Meter; Cables.....$335.00

Highly versatile, powerful software tool for science students in high school and beyond. Combines data gathering, analysis, and graphing functions in a single package. Package includes software and specially designed interfaces and probes that enable students to carry out 15 chemistry experiments. In addition, a unique feature of the software allows teachers and students to design their own experiments and create the programs to carry these out.

Students record data, using a temperature probe or an electrode, while they carry out a variety of experiments. There are two separate screen displays; either shows data as a graph or a table. Special on-screen options allow students to manipulate the data in a wide variety of ways and instantly displays the results of thier manipulations. The software includes several modes students can control: input setup, range-set, data acquisition, line mode, edit mode, disk-access mode, computation, and print. Single-letter commands appear on the bottom of each screen, making it easy to choose modes and displays. Data can be saved on disks or printed out on a printer in tabular or graphic form, so experimental results can be compared. Two groups of data can be kept in the computer at all times to be used singly or merged. All the probes can be calibrated to standards. Includes interface box, probes, pH/mV meter, cables. Backup; teacher's guide. *NOTE: This program will not work on the Apple IIc.*

EXPERIMENTS IN HUMAN PHYSIOLOGY

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Special Hardware.....$249.00

"Here is a dynamic way for students to learn about the scientific method...this one's a winner." **Courseware Review 1983.**

There is no more effective way to understand the internal processes of human physiology than through the actual measurement of our physical responses. This innovative package allows students to use the computer as a tool to do what a scientist or doctor does: to measure and record fine physiological parameters. With the aid of accurate detectors of pulse rate, respiration rate, skin temperature, body temperature, and reaction times, students record their own and other's physical reactions in real time directly on the computer display. In recording the same phenomenon over a period of time, students can use the computer to create graphs of physical behavior. Contains everything needed for ten experiments: disk; interface box; necessary probes, sensors and cables; documentation including a user's guide with references, write-ups of the experiments with instructions and suggestions for further activities, and student data sheets for recording results.

The following ten experiments can be done:

Heart Rate Measurements - Experiments designed to acquaint the user with the apparatus and the various display options.

Reaction-time Measurement - Users measure finger reaction times with a bright light stimulus. Experiment reinforces the need for repetitive measurements and statistical interpretation of data.

Calibration - The temperature and timing functions are calibrated against standard. This requires an accurate stopwatch, a fever thermometer, and a lab thermometer (not supplied).

Temperature Measurements - Temperature probe is used to determine body and skin temperatures. It is then mounted near the nose and nose temperature history is plotted. Special software uses this input to plot a breathing-rate history.

Homeostasis - Students investigate the body's ability to maintain a constant internal temperature by subjecting a volunteer subject to mild temperature excursions while recording and displaying skin and body temperature.

Reaction-time Investigations - Effects on reaction time of stimulus type and response location are studied. Stimuli include a variable-intensity lamp, a variable-pitch sound, and the graphics screen. The action speeds of hand, foot and facial muscles are compared.

Physiology of Exercise - Effect of exercise and physical condition on heart rate, breathing rate, and skin temperature.

Physiology of Stress - Physiological response to the stress of a frustrating and abusive quiz is measured. A "lie detector" is simulated and its short-comings discussed.

Physiology of Sleep - A napping subject is monitored for heart and breathing rate. Results are compared to measurements taken while the subject is awake.

Applications to Psychology - Number of topics are investigated, including biofeedback, conditiong experiments, and perception measurements.

NOTE: This program will not work on the Apple IIc.

EXPLORING THAT AMAZING FOOD FACTORY, THE LEAF

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$49.95

Master Teachers Program. Includes excellent graphics. Topics covered: transport in the leaf, structure of the leaf, and stomate action in gas exchange. Students will learn: the external parts of a typical leaf; how food, water, and minerals are carried by all parts of the plant; what materials are needed for photosynthesis to take place -- and what its by-products are; and what cutin, epidermis, palisade layer, spongy layer, stomata, guard cells, chloroplasts are – and what they do. Teacher's guide.

FIVE SENSES

APPLE II DISKETTE P I

Complete Series (4 Sets; 4 Diskettes).....$135.00

EYES HAVE IT

1 Apple II Diskette, 48K.....$39.95

This vivid program helps the user demonstrate our vision from the structural parts of the eyes to how each individual part works to bring us information and entertainment. Brilliant computer graphs and user-controlled experiments with light rays and corrective lenses for near and far-sightedness are included, as well as interesting examples of optical illusion and Braille. A look at nature's gift of built-in eye protection and do's and don'ts about eye care complete this informative, imaginative disk. Teacher's guide.

NOW HEAR THIS

1 Apple II Diskette, 48K.....$39.95

Special computer music and sound effects help illustrate sound waves, how sound begins, and what determines pitch and volume. The user will learn also how sound waves can bounce to produce echoes. The three parts of the ear are described with unique computer graphics to show how each part contributes to our hearing. Relevant information about sign language and finger spelling is included, as well as how the ears protect themselves from damage and what we can do to keep our ears healthy and functioning. Teacher's guide.

SMELL AND TELL

1 Apple II Diskette, 48K.....$39.95

A fun-to-use exercise about odors in the air launches a computerized lesson on the sense of smell and the protection from danger it gives us. The user will learn about "sense fatigue"...how we become so accustomed to a smell that we are no longer aware of it. The strong link between taste and smell is stressed, and stunning computer graphics show how taste buds work to send messages of sweet, sour, salty and bitter to the brain. Safety tips in choosing things to taste and smell conclude this original disk. Teacher's guide.

TOUCHY SUBJECT

1 Apple II Diskette, 48K.....$39.95

Keeping in touch with the outside world, this creative computer program compares the nerves to an alarm system. Students do computerized experiments illustrating touch, hot, cold, pressure and pain, which are sensed by delicate nerve endings in the fingertips, lips and tongue, and less acutely, in other parts of the body. Pain is a warning signal and is nature's way of alerting us to problems that need attention. Through action, comparison and computer participation, the user learns to "keep in touch". Teacher's guide.

FLIGHT SIMULATOR II

APPLE II DISKETTE H C A

1 Apple II Diskette, 48K; Handbook.....$49.95

Put yourself in the pilot's seat of a Piper 181 Cherokee Archer for an awe-inspiring flight over realistic scenery from New York to Los Angles. High speed color-filled 3D graphics will give you a beautiful panoramic view as you practice takeoffs, landings, and aerobatics. Complete documentation will get you airborne quickly even if you've never flow before. When you think you're ready, you can play the World War I Ace aerial battle game. Flight Simulator II features include: animated color 3D graphics; day, dusk, and night flying modes; over 80 airports in four scenery areas: New York, Chicago, Los Angeles, Seattle, with additional scenery areas available; user-variable weather, from clear blue skies to grey cloudy conditions; complete flight instrumentation; VOR, ILS, ADF, and DME radio equipped; navigation facilities and course plotting; World War I Ace aerial battle game. Complete information manual and flight handbook.

FORECAST!®

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$49.95

Students can now predict tomorrow's weather with this weather station. Employing the same methods used by professionals to track storm fronts, chart weather patterns and stay on top of the weather. *Forecast!* unlocks the mysteries behind weather prediction and helps students develop an understanding of how atmospheric conditions interact to produce the weather. Developed by nationally recognized professional meteorologists, *Forecast!* provides scientific explanations for weather conditions in addition to forecasting the weather itself. Comprehensive program guide.

GENE MACHINE

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$69.00

Designed to reinforce what students read in texts about DNA replication and protein synthesis. Provides a brief review, simulates the functions of DNA and RNA, and then lets the students themselves be in charge and manipulate genetic material. Includes the following tasks for students to perform: Shows students a strand of DNA and then they synthesize a complementary strand. From a single strand of DNA students transcribe a strand of mRNA. Students can input an mRNA codon and see the amino acid for which it codes. Students input an amino acid and see the corresponding mRNA codons. Students construct their own polypeptide chains by inputting a series of mRNA codons. Teacher's guide.

GENERAL CHEMISTRY PRE-LAB STUDIES

APPLE II DISKETTE H C

4 Apple II Diskettes, 48K; Backups.....$200.00

"*All in all, an excellent piece of work...*" **Alan Smith, Univ. of Southern Maine.** "*Excellent graphics, clear directions, good concept building.*" **Marguerite Newman, Clark College.**

A unique package of interactive tutorial programs that help non-majors make better use of their lab time -- and get better results from their work -- through an intensive review of selected chemical concepts and techniques encountered in the laboratory. The programs – demonstrations, exercises, animated sequences, and simulations -- cover areas that usually require special one-to-one tutoring by instructors. Includes: Safety Review Exercise, Laboratory Techniques and Operations; Weight, Moles and Stoichiometry; Water, Solutions, and Colloids; Acids and Bases. Teacher's guide.

HEART SIMULATOR

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$49.00

Selected for exhibit at the Boston Museum of Science.

Uses high-resolution color grahpics and animation to depict blood flowing through the heart as it beats. Includes: Blood Flow Through the Heart; Timing Exercise for the Heart; Heart-to-Lung Blood Flow; and Identifying Parts of the Heart. Comes with helpful lesson planner. Backup; teacher's guide.

HOW PLANTS GROW: THE INSIDE STORY

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$49.95

This Master Teachers Series uses excellent graphics. Includes growth and root tip of the plant; stem cross section, terminal bud, and plant hormones. Students will learn: how plant growth begins; cell division; how water and food are carried throughout the plant; meaning of merismatic tissue, xylem, phloem, cortex tissue, palisade cells; and what causes leaves to fall, fruit to form, and flower buds to open in specific patterns. Teacher's guide.

HUMAN BODY: AN OVERVIEW

APPLE II DISKETTE I J H

1 Apple II Diskette, 16K.....$90.00

Best Microsoftware of the Year 1983, **Learning Periodicals Group.** "*Recommended.*" **School Library Journal, Aug 1982.** "*...material is factual and clearly presented.*" **Educational Technology, Aug 1982.**

See your body in a new dimension! The fascinating systems of the human body come alive with engaging and animated graphics to illustrate the text. Puts you on familiar terms with yourself. For people with bodies ages 11 through adult. User-friendly; 8 lessons. Contents: Introduction to the Human Body; Muscular System; Digestive System; Respiratory System; Skeletal System; Circulatory System; Nervous System; Review Test. Comprehensive teacher's guide.

HUMAN GENETIC DISORDERS

APPLE II DISKETTE H C

1 Apple II Diskette, 48K; Backup.....$69.00

This program is a simulation that enables students to investigate inherited disorders. It is designed for high school biology students. Also appropriate for introductory college biology courses, health courses, and nursing education. Includes: Exploring Inheritance of a Specific Disorder and Exploring an Unknown Genetic Disorder. Teacher's guide.

IDENTIFYING INSECTS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$69.00

Helps students explore the world of insects: morphology, behavior, habitats, and characteristics. In a game format, students try to identify insects using as few clues as possible. They can count and examine the wings, notice colors and markings, observe the antennae and mouth parts or contact the "collector" for information such as habitat and behavior. "Beginners" and "advanced" level. Extensive teacher's guide.

IDENTIFYING MINERALS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$39.00

Game format. A mountain climbing expedition provides the setting for students to test their knowledge about the lab identification of mineral's properties: color, streak, luster, hardness, cleavage, fracture. Each correct answer results in a chance to use a different climbing tool. Teacher's Lesson Planner with complete synopsis of material contained in program.

INFERENCE AND PREDICTION

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$45.00

The classic "Black Box" activity comes to the computer. Numbers and letters go through a machine on the screen called the Changer. Game players observe changes in the numbers or letters made by the machine, make inferences about the internal workings of the machine, and attempt to predict what will come out of the Changer next. Both game programs in the package provide a learning environment which fosters critical thinking and insight. Develops logic, math, fundamental scientific predicting skills. Teacher's guide.

INTRODUCTION TO GENERAL CHEMISTRY

APPLE II DISKETTE H C

Learning Software Awards, Jan 1984. "*...simulated and well-animated experiments.*" **Classroom Computer Learning, Jan 1984. Included in Minnesota State Department of Education High Quality Courseware List, 1984.**

Designed as a supplement to an introductory course in General Chemistry for students who have had no previous chemistry background. Simulated experiments used in developing basic concepts allow the student to gain experience in collecting and interpreting data. Graphics and animations help give an intuitive feeling for chemical concepts. Problem sets provide extensive practice solving problems beginning with easy structured problems and progressing to more difficult, less structured ones. Diagnostic feedback is provided for errors and help is also available. Teacher's guide with each set.

PERIODIC TABLE, GENERAL CHEMISTRY

1 Apple II Diskette, 48K; Backup.....$70.00

Includes: Periodic Table, Names of Elements, Isotopes and Atomic Weight, Properties of Some Elements, Mystery Elements.

NOMENCLATURE, GENERAL CHEMISTRY

1 Apple II Diskette, 48K; Backup.....$70.00

Includes: Nomenclature, Variable Oxidation State Salts, Two Nonmetals, Acids, Bases, Ternary Salts, Review Practice Problems.

BALANCING EQUATIONS, GENERAL CHEMISTRY

1 Apple II Diskette, 48K; Backup.....$70.00

Includes: Chemical Formulas, Chemical Equations, Writing Equations, Balancing Equations, Problems.

PH: ACIDS AND BASES IN WATER

1 Apple II Diskette, 48K; Backup.....$70.00

Helps the students develop an understanding of the concepts of acidity and alkalinity.

METRIC SYSTEM

1 Apple II Diskette, 48K; Backup.....$70.00

Helps students develop a familiarity with metric measurements, especially those they will work with in the course of their chemistry studies. Covers temperature, length, volume, mass, and density. Color monitor preferred, but not necessary.

INTRODUCTORY GENETICS

APPLE II DISKETTE J H

2 Apple II Diskettes, 48K; Backup; Wkbk.....$85.00

Included in Minnesota State Department of Education High Quality Courseware List, 1984.

Includes patterns of heredity; Mendel's Laws: segregation, dominance and independent assortment; Homozygous and heterozygous offspring; Genotype/phenotype activities. Monohybrid and dihybrid crosses; Punnett square interactive exercises; Incomplete dominance. Sex determination and linkage; Carrier. Probabilities; Random mating simulation. Inbreeding simulation; Generic hazards and pure strains. Complete with 25 student lab booklets and teacher's guide.

LIGHTNING AND THUNDER

(Nature's Fireworks)

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$24.95

High-resolution graphics and text. Covers: Myths about Lightning; What Causes Lightning; Types of Lightning; Safety; Thunder; Lightning Isn't All Bad; and Check Your Knowledge.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

LIFE FUNCTIONS

APPLE II DISKETTE H C

2 Apple II Diskettes, 48K; Study Sheet.....$85.00

A unique visual learning experience; a classic lesson in the life functions coupled with a dynamic graphic presentation. The student sees the Hydra ingest its food, transport digested nutrients, synthesize a protein, incorporate this protein into the cell membrane, form buds, etc. Each of 14 life functions is listed, explained, illustrated and defined. Clear distinctions are made between excretion/egestion and locomotion/transport. Includes a separate test disk, and tutorial disk. Teacher's guide.

MAKING CIRCUITS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$29.95

Very well done. Uses graphics to teach the concept of electrical circuits. Includes both tutorial and practice as the students learn the concepts and then draw wires and switches to connect parallel and serial circuits.

MEIOSIS

APPLE II DISKETTE H

1 Apple II Diskette, 48K; Backup; Wkbk.....$55.00

An interactive simulation of gamete formation with four options: oogenesis and spermatogenesis, with and without nondisjunction. Color graphics of diploid to haploid process including DNA duplication, tetrad formation, synapse, crossing over and sperm/egg formation. Extensive review. Complete with 25 student lab booklets and teacher's guide.

MODELING: BLACK BOX PLUS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$36.00

Much of what scientists believe to be true about the world cannot be seen directly. We can't see an atom, or heat, or the "stuff" that makes up light. Scientists, therefore, develop models as useful ways of thinking about these invisible things. Modeling develops the concept of a model through experiences with "black box" machines. An exponential model describes poulation growth. Students experiment with the trajectory of flying objects, using the computer to calculate the distance that the objects will fly. Includes handouts, transparencies, and a quiz. Teacher's Guide.

NUTRITION

APPLE II DISKETTE I

Complete Series (3 Sets; 3 Diskettes).....$101.00

FOOD FOR THOUGHT

1 Apple II Diskette, 48K.....$39.95

Learn good eating habits and have fun doing it with this challenging computer program. Up-to-date nutritional information, including the five food groups and interesting facts about 30 different foods, is presented with many colorful graphics and significant computer-student interaction. A quiz and a unique teacher management system to record individual scores, are an added plus in this lighhearted, but effective disk. Teacher's guide.

YOU ARE WHAT YOU EAT

1 Apple II Diskette, 48K.....$39.95

Entertaining and easy to use, this personalized disk analyzes the individual student's daily meal plan, pinpointing the strengths and weaknesses of current eating habits. Selections are made from a basic food list (which the user may add to), and a computer-generated analysis is presented through charming and witty color graphics. An ideal program for nutrition study, this unique disk offers printout capability for permanent record keeping and detailed instruction in the documentation.

FOOD GROUP PUZZLES

1 Apple II Diskette, 48K.....$39.95

Two sparkling new computer games use colorful, stimulating high resolution graphics to review and reinforce food group facts and concepts. **Food Groups - Sorting Them Out** is easy to play, and encourages the user to place individual pictures of foods in the correct food group. **Food Goups -- Putting Them All Together** is a more complex game which allows creative placement of foods in a balanced daily meal plan. Learning about nutrition will be fun with these intriguing games. Teacher's guide.

OPERATION: FROG

APPLE II DISKETTE I J

1 Apple II Diskette, 64K.....$39.95

"*...can teach younger students the basics of frog anatomy and act as a useful introduction or supplement to the real thing.*" **Personal Computing, Jan 1985.**

Interactive computer program that simulates a real dissection. Students must select the proper sequence and instruments. Once they have placed an organ on the "examination tray", they can call up diagrams and animation sequences that illustrate how the organ works inside the frogs body. Upon completing the dissection, they have the chance to reconstruct the frog. When the frog is correctly reassembled, there's a reward: It comes back to life and hops off the screen. Error messages and a "help key" provide guidance and prevent frustration. Teacher's guide.

ORGANIZING AND CLASSIFYING INFORMATION

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$36.00

Classification is an important process in science because it aids in organizing and making sense out of large bodies of information. As the amount of information increases, our ability to handle it effectively decreases. Fortunately, however, computers can greatly aid our use of such information. This module uses a simple database inquiry system to enter, search, and sort data. Both the process and results of this activity are closely related to the process of scientific classification. Includes handouts, transparencies, and a quiz. Teacher's guide.

OUR SOLAR SYSTEM

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$29.95

A special one disk program that makes it much easier to understand the cosmic wonders of our part of the universe. Every science class should have this one. Teacher's guide.

PHOTOSYNTHESIS SERIES

APPLE II DISKETTE H C

Special Features: Tutorial programs for high school or junior college students. Extensive animation, color graphics. User control of lesson pace. The special type-in format involves students with the lesson, prevents non-interactive responses, and serves as reinforcement. Separate test disk.

PHOTOSYNTHESIS: BASIC

3 Apple II Diskettes, 48K; Student Sheets.....$130.00

Begins with a discussion of chloroplast structure and function, ATP-ADA conversion, and the role of chlorophyll in the light-trapping process. Animated color graphics and sound are used to show: the chemical pathways of both light and dark reactions, the splitting of water, synthesis of ATP, production of $NADPH_2$, and others. User controls pace. Student study sheets and teacher's guide.

PHOTOSYNTHESIS: ADVANCED

5 Apple II Diskettes, 48K; Study Sheets.....$250.00

A comprehensive lesson on the chemical pathways involved in photosynthesis. For advanced placement, high school honors and first year college biology students. Includes: leaf and chloroplast structure and function; role of chlorophylls; photosystems I and II; cyclic photophosphorylation; noncyclic photophosphorylation; chemiosmotic coupling; carbon fixation -- 3-carbon pathway/4-carbon pathway. Extensive animation, color graphics, user control. Student study sheets and teacher's guide.

PHOTOSYNTHESIS: UNLOCKING THE POWER OF THE SUN

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$49.95

Outstanding Master Teachers program. Includes: Light as Energy; Characteristics of Light; Wavelength of Light Used by Chloroplasts; and Variables and Controls. Students will learn: what photosynthesis actually is; how different colors of light are either absorbed or reflected; what chloroplasts and chlorophyll are; and how the wavelengths of different colors of light affect cell growth and distribution. Teachers' guide.

PHYSICAL SCIENCE PACKAGE

APPLE II DISKETTE J H

Complete Series (3 Sets, 3 Diskettes).....$279.00

CHEMISTRY I

1 Apple II Diskette, 48K; Backup.....$89.00

Game format. Students answer questions about solids, liquids, gases, phase changes, atomic structure, periodic table, bonding, acids and bases. 3 games: climbing Focus Mountain, road race and wager of money on a game board. Extra help provided for incorrect responses. High resolution graphics. Teacher's guide with complete synopsis of each game.

ENERGY: HEAT AND SOUND

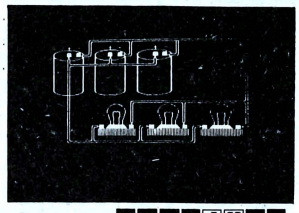
1 Apple II Diskette, 48K; Backup.....$69.00

A snowball fight and a sharpshooters contest are the rewards for correct answers about heat energy, temperature, sound energy, and wave motion. Teacher's guide contains a complete synopsis of each game for the teachers reference.

MATTER AND ENERGY

1 Apple II Diskette, 48K; Backup.....$159.00

Correct answers allow students to play games - wager money on a game-board; racing the clock; assembling a stranded rocket ship and returning to earth; and sharpshooters contest at a shooting gallery. Topics include: Elements and Symbols; Compounds; Mixtures; Physical and Chemical Changes; Potential and Kinetic Energy; and Energy Changes. All programs provide extra help for incorrect responses. Comprehensive teacher's guide with complete synopsis of each game.



PHYSICAL SCIENCE

APPLE II DISKETTE J H

7 Apple II Diskettes, (14 Programs), 48K.....$250.00

Designed for review for students who have been introduced to physical science concepts. Format is: Question...information if needed...more information if needed. Uses latest branching techniques to branch to sub-programs on any concept in which student has difficulty. Contains numerous high resolution graphics such as molecular structures, optics, electrical schematics and light waves. Student names and grades are stored for teacher use. Makes it possible for teacher to monitor student progress and to assess which concepts are causing difficulty. Teacher's guide.

Each title contains: 1 Apple II Diskette, 48K and a Teacher's guide. Price per title.....$29.00

- Matter.....$29.00
- Atoms.....$29.00
- Families of Atoms.....$29.00
- Bonding.....$29.00
- Reactions.....$29.00
- Acids and Bases.....$29.00
- Carbon Chemistry.....$29.00
- Radioactivity.....$29.00
- Motion.....$29.00
- Energy.....$29.00
- Sound.....$29.00
- Light.....$29.00
- Electricity.....$29.00
- Magnetism.....$29.00

PHYSICAL SCIENCE BASEBALL

APPLE II DISKETTE J

Complete Series (2 Sets, 2 Diskettes).....$55.00

"*Highly motivating...Recommended.*" **Booklist, Jan 1983.**

A high resolution competitive baseball game designed to help students learn basic terms and definitions in junior high school physical science. A correct response to a question results in the player's team advancing to a higher base and possibly scoring a run. An incorrect response and the student gets a brief explanation of the correct answer. Three wrong answers and the inning is over. The high scorer for each game has his/her score recorded until it is beaten. Teacher's guide.

PHYSICAL SCIENCE BASEBALL: CHEMISTRY

1 Apple II Diskette.....$29.50

Contents: Matter, Atoms and Compounds, Periodic Table, Bonding, Chemical Reactions, Acids and Bases, Organic Chemistry, Radioactivity.

PHYSICAL SCIENCE BASEBALL: PHYSICS

1 Apple II Diskette.....$29.50

Contents: Motion, Energy, Waves, Light, Sound, Electricity, Magnetism.

PHYSICS PROGRAMS FOR THE APPLE

APPLE II DISKETTE H C

These programs help you teach introductory physics through: Lab Simulation - allows students to "experiment" with situations which are difficult to arrange in the lab; Teaching Aids - helps the teacher accomplish a task which was impossible or time consuming without a computer; Data Analysis - helps students or teacher analyze experimental results; Problem Solving Practice - presents students with "problems" which they are to solve (the computer provides feedback); Lab Instrument - turns the computer into a valuable laboratory instrument. High resolution graphics. Complete documentation including: User's guide for students; Teacher's manual with background information and suggestions for classroom use.

CHARGED PARTICLES
GRAPHIC ANALYSIS
KINEMATICS - PHYSICS
ORBIT
PROJECTILES
RAY TRACER
VECTOR ADDITION
WAVE ADDITION

(Each title, 1 Apple II Diskette, 32K.....$24.95)

PHYSICS TEST MAKER

APPLE II DISKETTE J H

4 Apple II Diskettes, 48K.....$85.00

Enables teachers to make tests or quizzes from a bank of about 750 multiple choice questions in each area. Features: generate any size text; mix questions; preview the question before choosing: upper and lower case; add your own questions; modify a test at any time; easy to change. Includes questions on: Mechanics, Energy, Waves, Electricity, Magnetism, Nuclear Physics. Teacher's guide. *NOTE: to utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.*

PHYSICS: 12 PROGRAMS

APPLE II DISKETTE H

6 Apple II Diskettes (12 programs), 48K.....$195.00
Review and practice of physics concepts. Features high resolution graphs and experimental set-up. Emphasizes experiments and problems and offers changing variables for the questions and experiments. Student names and grades are stored for teacher reference. Teacher's guide.

Each title contains: 1 Apple II Diskette, 48K and a Teacher's Guide. Price per title.....$28.00

- Circular Motion.....$28.00
- Newton's Laws.....$28.00
- Acceleration.....$28.00
- Uniform Motion.....$28.00
- Free Fall.....$28.00
- Projectile Problems.....$28.00
- Momentum.....$28.00
- Work and Energy.....$28.00
- Heat.....$28.00
- Waves.....$28.00
- Gas Laws.....$28.00
- Sound - Physics.....$28.00

PLANETARIUM ON COMPUTER: THE SOLAR SYSTEM

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$69.00
Help your classes study the solar system. Explore astronomy with the help of animated high-resolution graphics. Includes: Moving Through the Solar System; Your weight on the Planets; Your Age on the Planets. Backup; teacher's guide.

PREHISTORIC LIFE

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$39.00
Reviews general information in a game format. Students make wagers on questions of varying difficulty concerning the ages of the earth, the evolution of animals, the descent of man, and more. Plenty of student interaction and high-resolution graphics. Backup; teacher's guide.

SCIENCE KEYWORD PROGRAMS

APPLE II DISKETTE J H

Unique game of thinking, word power and spelling which helps student develop an understanding of scientific terms. Each program uses secret words discovered by uncovering clues that include synonyms, examples, definition, and applications of the vocabulary in your curriculum. Arranged by topics and units. Extensive libraries of scientific terms and clues. Backup; teacher's guide with each title.

BIOLOGY KEYWORD PACKAGE

Complete Series (4 Sets; 4 Diskettes); Backups.....$129.00

HUMAN SYSTEMS KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Includes: digestive, circulatory, excretory, respiratory, nervous, endocrine, reproductive and support systems.

INVERTEBRATE BIOLOGY KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Students develop their reasoning skills as they discover the meaning of terms associated with: protozoa, sponges, worms, coelenterates, mollusks, echinoderms, arthropods, and insects.

PLANT BIOLOGY KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Students guess keyword vocabulary related to the topics of: fungi, algae, mosses and ferns, higher plants, leaves, roots and stems, and plant reproduction.

VERTEBRATE BIOLOGY KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Subject areas include: phylum chordata, fish, amphibians, reptiles, birds, and mammals.

EARTH SCIENCE KEYWORD PACKAGE

Complete Series (2 Sets, 2 Diskettes); Backup.....$59.00

ASTRONOMY KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Students guess keywords in vocabulary related to topics of: the sun, the moon, the solar system, stars and galaxies, constellations, astronomers and instruments.

ROCKS AND MINERALS KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Students discover the meaning of terms associated with: igneous rocks, metamorphic rocks, sedimentary rocks, metallic minerals, nonmetallic minerals, mineral fuels, gems, property and structure.

PHYSICAL SCIENCE KEYWORD PACKAGE

Complete Series (2 Sets, 2 Diskettes); Backups.....$59.00

ENERGY KEYWORD
1 Apple II Diskette, 48K; Backup.....$39.00
Vocabulary related to: energy, heat, sound, light, electric charges, electric current, and magnetism.

RENDEZVOUS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.95
"...one of the most sophisticated simulations yet on the market...best used in gifted junior high school physics or engineering class." **Electronic Learning, Nov/Dec 1981.**
A space shuttle flight simulation created by a NASA research flight from Earth Liftoff, through Orbital Rendezvous and Approach, to Alignment and Docking with a space station. High resolution graphics and animation capture the drama and difficulty of space navigation. Scoring is a measure of your overall performance. Recommended for individual players, age 13 and over, and is suitable for classroom application in General Science, Earth Science, and Physics.

ROCKS: PROPERTIES AND USES OF MINERALS

APPLE II DISKETTE I

1 Apple II Diskette, 48K; Rock Kit.....$68.00
1984 Creative Computing Outstanding Software Award.
The first part of the program introduces the child to the properties of rocks: color, shiny or dull, weight, feel, crystal shape, streak color, and hardness. Next, the computer helps the student to identify the rocks by asking questions about their properties. In the final portion of the program, the important uses of the rocks are learned. Eighteen rock samples and other testing materials are included with this Microcourse. Teacher's guide.

SCIENCE SERIES

APPLE II DISKETTE J H

SCIENCE 1: BIOLOGY/PHYSICS
1 Apple II Diskette, 48K; Backup.....$45.00
Simulations based on scientific models form the basis for several of these science programs. Students can control and manipulate the variables affecting models of such far-ranging topics as the population dynamics of a buffalo herd, the Millikan Oil Drop Experiment, Young's double slits physics experiment, and whale migration. Other game-type programs help students understand concepts of isotopes, atomic weight, vectors, radioactive decay, and the sampling of a fish population. Teacher's guide.

SCIENCE 2: BIOLOGY/PHYSICS
1 Apple II Diskette, 48K; Backup.....$49.00
Set of science simulations form rich supplementary activities for the science classroom. Allows students to use one of the primary strategies of science: exploration through trial and error. As students experiment with the variables, they define the model and realize the effects and interrelationships of the variables with which they are experimenting. Students are assisted by worksheets from the teacher's manual. Biology topics include cell membrane diffusion and environmental effects of pesticides. Physics topics include momentum and kinetic energy during the collision of two bodies, radioactive decay, light wave refraction, diffusion rates of gases. Mathematical concepts, including arc tangents, are presented in two programs simulating missile positions on a coordinate system. Teacher's guide.

SCIENCE 3: EARTH/LIFE SCIENCE
1 Apple II Diskette, 48K; Backup.....$49.00
Programs include: **Fish** - a tutorial on blood circulation in animals with two-chambered hearts; **Minerals** - a computerized key to 29 common minerals; **Odell Lake** - a food chain simulation. Also earth science students can learn how to calculate distance to the epicenter of an earthquake using **Quakes. Ursa** displays five major constellations and their orientation at different times and dates. Teacher's guide.

SCIENCE 4: PHYSICS/CHEMISTRY
1 Apple II Diskette, 48K; Backup.....$48.00
For use during teacher lecture/demonstrations. The programs develop a science lesson in a linear progression of steps, providing the instructor with interactive visuals. At times during the progress of a lesson, the students are asked to do calculations or make determinations which are entered into the computer by the instructor. The computer processes the data and provides feedback. Support materials include handouts and/or lecture notes which are correlated with frames in the microcomputer lesson. Topics include three programs on solubility products, two programs on the gas laws of Charles and Boyle, and one program on the Milliken Oil Drop experiment. Teacher's guide.

SIMPLE MACHINES

APPLE II DISKETTE I

1 Apple II Diskette, 48K.....$29.95
Addresses the principles and applications of six simple machines including the lever, pulley, wheel and axle, inclined plane, wedge, and screw. Illustrative applications are presented for each machine. Student can work several exercises intended to further reinforce his understanding of each machine. Includes quiz.

SOLAR SYSTEM

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
Hi-res full color graphics bring each planet, the Sun, the Moon and beyond, down to earth. Test your knowledge of Astronomy with hundreds of questions on different skill levels.

SCIENTIFIC CLASSIFIER SERIES

APPLE II DISKETTE H

A series of vocabulary programs that will really help your students learn to classify science information. In each game a list of ten words appears on the left of the screen. To the right are three columns, each with a heading. The object of the game is to move the words into the correct columns. There is also a more difficult level where the headings of the columns are not revealed. Ideal for advanced students, this version of the game gives the skills of inductive reasoning and classifying a good workout. Includes attractive graphics, lively music and animation. Easy-to-use. Each edition contains at least 30 game sets. Backup and teacher's guide with each title.

SCIENTIFIC CLASSIFIER: CHEMISTRY OF MATTER
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Phases of Matter, Measurement, Properties of Matter, Changes, Elements, Compounds, Mixtures, and The Atom.

SCIENTIFIC CLASSIFIER: ENERGY
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Light, Sound, Electricity, Heat and Temperature, Sources of Energy, Types of Energy, and Uses of Energy.

SCIENTIFIC CLASSIFIER: INVERTEBRATE BIOLOGY
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Protozoans, Sponges, Coelenterates, The Worms, Mollucks, Arthropods, and Insects.

SCIENTIFIC CLASSIFIER: VERTEBRATE BIOLOGY
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Fishes, Amphibians, Reptiles, Birds, and Mammals.

SCIENTIFIC CLASSIFIER: PLANT BIOLOGY
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Algae, Mosses and Ferns, Higher Plants, The Leaf, Roots and Stems, and Plant Reproduction.

SCIENTIFIC CLASSIFIER: ECOLOGY
1 Apple II Diskette, 48K; Backup.....$35.00
Includes Food Webs, Symbiosis, Communities, Niches, and Biomes.

SOLAR FOOD
(Exploration of Photosynthesis)

APPLE II DISKETTE J H C

1 Apple II Diskette, 48K; Backup.....$59.00
Photosynthesis is a complex series of reactions which comprise one of the most important biochemical processes. This program helps students expand their understanding of the individual reactions and the overall significance of photosynthesis. Throughout the program, diagnostic feedback to student answers turns the computer into a responsive information source, providing a personalized learning experience. Backup; teacher's guide.

SOLAR SYSTEM ASTRONOMY

APPLE II DISKETTE H

1 Apple II Diskette, 48K.....$30.00
Up-to-date information on the planets and their moons including data from NASA fly-bys during the last ten years. Includes: Solar System History; Greenhouse Effect; Life in the Solar System; Comets; Inner Planets; Outer Planets; Paddle Graphics.

STANDING WAVES

APPLE II DISKETTE H C

1 Apple II Diskette, 48K.....$75.00
Creates animated displays of standing and traveling waves. The simulation may be run by instructor or student to demonstrate most basic wave concepts – frequency, wavelength, wave velocity, harmonics, and superposition. May be used in classroom demonstrations, laboratory assignments, or individual study projects. It is appropriate for courses in high school science and physics, college physical science, introductory physics and engineering. Color monitor recommended. Teacher's guide.

STAR SEARCH

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup; Book.....$49.50
"...uses the computer to its full capacity...flexible enough that someone with minimal knowledge can work successfully with the simulation, while an expert can also find it challenging." **Electronic Learning, May/June 1984.**
Supposes the existence of a star base on Pluto. The Satellite scanner detects a signal from the direction of Epsilon Eridani and the players have their mission. Each player is the captain of a ship who must choose crew members, supplies and tools and search for the origin of the signal. Players will learn about the various planets and have the opportunity to look for alien life forms. If found, these life forms are designed to be "possible" given the environments in which they are supposed to live. Each game is different. Players may also save games for later re-entry. A player wins on the basis of how well he/she does in managing his/her resources and making discoveries. Teacher's guide.

STELLAR ASTRONOMY

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$30.00

Explains main sequence stars, novas and super novas, white dwarfs, and red giants. Discusses physical theories for the origin of the universe and explores other philosophical possibilities.

STRATIGRAPHY

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$29.95

Watch geological processes change the landscape in colorful hi-res animation. Folds, faults, erosion, deposition, and intrusions can be selected in any sequence to create endless patterns. Includes guide and reproducible worksheets.

SYSTEMS OF THE HUMAN BODY

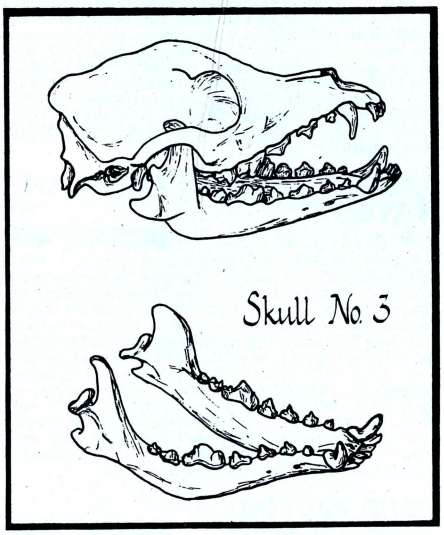
APPLE II DISKETTE [E][P][I][J][H][C][A]

6 Apple II Diskettes, 48K.....$150.00

Provides students with information on the various systems of the human body and also teaches comprehension skills. Each program is divided into four parts - new words, vocabulary, tutorial, and final test. Since new or difficult words are often a barrier to comprehension, these words are introduced before they are encountered in the tutorials. New words are listed with their phonetic spelling and appear in sentences rich in context clues. Next a sentence appears on the screen with words deleted and the students are required to type in the deleted words. In Vocabulary, students match words with their meanings within a game format designed for two players. Two lessons appear in the Tutorial section. Important concepts are graphically illustrated, and captions explain the graphics, reinforcing the concepts discussed. Activities are positioned throughout the tutorial portion to enhance student's comprehension and acquisition of the science concepts and vocabulary, Final Test section gives students immediate feedback regarding their answers. This program also contains a management system where scores are accumulated. Teacher's guide.

Skin
Bones
Circulation
Muscles
Digestion
Respiration

(Individual title, 1 Apple II Diskette, 48K.....$29.95)



TEETH: ANIMAL SKULLS AND HUMAN TEETH

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K; Study Cards.....$38.00

1984 Creative Computing Outstanding Software Award.

Introduces students to the three types of teeth: incisors, canines, and molars. The Study Cards have pictures of beaver, deer, dog, and fish skulls. In the middle part of the program, the children learn about their own teeth with the help of teeth diagrams on the monitor screen. Additional Study Cards show the inside of a tooth and skull X-rays. The importance of proper dental care is emphasized in the last part of the program. Teacher's guide.

T.REX:® A SCIENCE SIMULATION

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$49.95

Exciting computer simulation offers users the opportunity to learn about life during prehistoric times from the viewpoint of the ferocious "King of the Dinosaurs". Users develop survival knowledge as they discover the needs of *T.rex* under varied environmental conditions. Within four levels of activity, the user controls *T.Rex's* movements and must maintain survival levels of food, energy, water and temperature while learning which prey to pursue and which to avoid. Scientific research has been employed in the development of the computer graphics to accurately depict prehistoric conditions. Featuring strategy-and-tactics, *T.rex* fosters critical thinking and problem solving through role-playing in natural history. User's guide.

THREE MILE ISLAND

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$39.95

"Play this game...and come away with a deep understanding of the major systems in a nuclear plant and a rich appreciation for how they interact." **Classroom Computer News, March 1983.**

Students can read all about the nuke controversy, but this realistic simulation puts them in control of a nuclear reactor. They must avoid a melt-down and make a profit while generating power. Exciting full-color graphics. Excellent addition to many high school and college courses. A program destined to become a classic.

TIME/SEASONS

APPLE II DISKETTE [E][P][I][J][H][C][A]

2 Apple II Diskettes, 48K; Student Workbook.....$111.00

Designed to supplement junior high geography courses. Tutorial and questions cover meridians, longitude lines, time line, celestial meridians and time zones, rotation, time quirks, seasons, length of day and years. After completing seven units of study, students use their knowledge to execute simulated international phone calls to four principal cities while working within time and budget constraints. In addition a simulated "World Farmer" game allows students to cultivate, fertilize, plant, irrigate and harvest crops in two vastly different areas, using their knowledge of seasonal differences to help in the planning. Includes a Teacher's Guide, and a black-line master student workbook.

VOLCANOES

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K; Backup; Manual; Wksh...$49.50

"...represents experiential learning at its best." **Electronic Learning.** *Notable Software 1982-83. Included in* **Minnesota State Department of Education High Quality Courseware List.**

A science simulation which uses a game format to teach diverse attitudes and skills and to present a great deal of information. Students band together in research teams to perform investigations, record and interpret data and make predictions on volcanic activity. Provides skills and knowledge in interpretations of scientific observations; use of maps; use of Cartesian coordinates; interpretations of histograms; types of volcanoes; volcanic terminology; and "real world" geography; methods and results of remote sensing surveys. Worksheets; student manual; teacher's guide.

WEATHER

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$29.95

A fascinating study of weather -- what it is, what causes it to change, and how to understand it. Teacher's guide.

WEATHER COMMAND: A SCIENCE GAME

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K.....$39.95

Students manipulate weather machines to bring about hospitable climates for ambassadors arriving from other planets. Challenges students to create appropriate weather for each ambassador -- fair skies, steady rain, dense fog -- with weather maps, forecasts, illustrations of cloud types, and other information available for reference. High resolution color graphics. Five levels of difficulty. Students learn about forces that produce weather, how weather patterns develop, and why they are so hard to predict. Teacher's guide.

WEATHER OR NOT

APPLE II DISKETTE [E][P][I][J][H][C][A]

2 Apple II Diskettes, 48K; Student Workbook.....$90.00

Designed to teach the basic vocabulary and concepts of meteorology in an enjoyable manner. Tutorial, interactive format hosted by a "balloonist" who invites students to join him on a balloon flight. During the course of the flight, students learn about meteorology and are asked questions about what they have learned. An accompanying simulation game allows students to apply those concepts as they set out on a dog sled race across the Yukon. Content studied covers air pressure, temperature, humidity, precipitation, and air masses as well as meteorological symbols. Includes teacher's guide, black-line master student workbook.

WHAT'S A MATTER

APPLE II DISKETTE [E][P][I][J][H][C][A]

3 Apple II Diskettes, 48K.....$110.00
3 Apple II Diskettes, 48K; Backup.....$130.00

Tutorials, questions and answers on the properties of solids, liquids, and gases. Changing states of matter, physical changes, and chemical changes are also examined using color graphics and animation to illustrate the text. Teacher's guide.

WHAT'S UP THERE

APPLE II DISKETTE [E][P][I][J][H][C][A]

3 Apple II Diskettes, 48K.....$95.00
3 Apple II Diskettes, 48K; Backup.....$115.00

Tour the Solar System in all its splendor! Hi-resolution color graphics display each planet's physical characteristics and illustrate various constellations. Discussion includes the properties of stars and planets. Teacher's guide.

WORLD AROUND US

APPLE II DISKETTE [E][P][I][J][H][C][A]

Complete Series (6 Sets; 6 Diskettes).....$169.00

These programs use colorful graphics and interesting animation techniques to explain basic science concepts that are encountered every day. Each disk includes a tutorial section and a quiz section. Using a split screen format, the tutorial segment of the programs explains basic science concepts while at the same time showing colorful examples and illustrations as reinforcement. The documentation includes a basic description of each program, follow-up suggestions, and lists of experiments that can be conducted using materials found at or near home.

LIGHT AND COLORS
1 Apple II Diskette, 48K.....$29.95

Principles of light spectra, rainbows, primary colors, reflection, absorption, pigments, filters, prisms, transparency, opaqueness, and translucence.

GETTING A CHARGE OUT OF ELECTRICITY
1 Apple II Diskette, 48K.....$29.95

Static charges (positive, negative, and neutral), attraction and repulsion of charged bodies, Leyden Jar, electric current, conductors, insulators, and primary and secondary batteries.

UNDERSTANDING WEATHER
1 Apple II Diskette, 48K.....$29.95

Air masses (polar, tropical, continental, and maritime), clouds (cumulus and stratus), fronts (warm, cold, and stationary), atmospheric pressure, thunderstorms, winds, tornadoes, and lightning.

PLANTS
1 Apple II Diskette, 48K.....$29.95

Shoot systems, stems xylem, phloem pressure, leaves, photosynthesis, chlorophyll, root systems, functions of the various parts.

SOUND CONCEPTS
1 Apple II Diskette, 48K.....$29.95

Vibrating tuning forks on the screen, sound waves, propagating, pictures of the ear and its functional parts, wave structure (pitch, amplitude, wavelength, frequency), propagating media.

GRAVITY
1 Apple II Diskett, 48K.....$29.95

Ancient ideas of Aristotle, Galileo, Copernicus; falling objects, orbital motion; Newton's laws of motion and mass; centripetal force.

WORLD OF INSECTS

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K; Backup.....$39.00

Help your students learn about different types of insects by answering questions on: Insect types, their body parts, relationship to man, and more, Game format. Backup; teacher's guide.

YOUR UNIVERSE

APPLE II DISKETTE [E][P][I][J][H][C][A]

1 Apple II Diskette, 48K; Backup.....$99.00

Three programs involving a combination of tutorial, drill-and-practice, and games. Students are asked questions, and then given tutorial help when needed. Extensive teacher's guide. **Solar System** - includes questions about the solar system: sun, planets, moon, and starts. **Earth** - Includes questions on the layers of the earth, the structure of the earth's crust, and methods for studying the earth. Extra help available when needed. **Weather** - Reviews such topics as evaporation, the atmosphere, condensation, the water cycle, cloud formation and weather prediction.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

SOCIAL STUDIES

AGENT U.S.A.
APPLE II DISKETTE I

1 Apple II Diskette, 48K.....$39.95
Game designed to teach U.S. geography. The FuzzBomb threatens to turn the United States into a nation of helpless fuzzbodies. Agent U.S.A., top investigator for an elite intelligence organization, must crisscross the country by train searching out the dreaded plague spreader. Also teaches practical math skills and problem solving. Teacher's guide.

AMERICAN GOVERNMENT
APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$45.00
Covers eight areas of American Government: Citizenship and Immigration, The Constitution, The Legislative Department, The Executive Department, The Judicial Department, The Electoral Process, State Government, and Local Government. The user may choose a review option or a quiz option.

AMERICAN HISTORY
APPLE II DISKETTE I

6 Apple II Diskettes, 48K.....$169.00
Interactive, branched programming allows students to become active participants in historical adventures. In each program a fictional or historical character guides the student through activities of the time period. During the adventure, the student has the opportunity to make certain choices and to discover the results of those decisions. When an incorrect decision is made, the information needed for decision-making is presented again at a lower reading level. The student is learning much about the time period as s/he assimilates and reviews the information needed to make the right choices. For review, a comprehensive, ten question quiz ends each program. Teacher's guide.

Jamestown - Pocahontas guides the student through the initial settlement of Jamestown.

Mayflower and the Pilgrims - Priscilla Alden's journey to the New World on the Mayflower and the early adventures of the Pilgrims.

Colony Settlement - William Dunn, a fictional English tavern keeper, helps the student choose a colony to settle in.

Western Expansion: Daniel Boone - Jemima Boone tells about her family's adventures west of the Appalachians.

Revolutionary War, Loyalist and Patriot - Ben Franklin asks the student to pick either the Loyalist or Patriot side in the Revolutionary War. Loyalist and Patriot roles are then explained.

Lewis and Clark Expedition - Sacagawea travels with the student on the Lewis and Clark expedition.
(Each title, 1 Apple II Diskette.....$29.95)

AMERICAN HISTORY ACHIEVEMENT SERIES
APPLE II DISKETTE H

AMERICAN HISTORY ACHIEVEMENT 1: PRE-COLUMBIAN TO 1860
1 Apple II Diskette, 48K; Backup.....$49.95
From a bank of over 1700 problems divided into five areas -- Economic, Political, Social and Cultural, Foreign Policy, and Intellectual History -- this program provides review and instruction in American History from pre-Columbian to 1860. The multiple choice format of problems is similar to that used in the College Entrance Examination Board's (CEEB) Achievement Test in American History. Student can select any area to review. All wrong answers are explained. Includes full analysis. Allows teacher to print hardcopy tests on any area or combination of areas. Ideal for review or for preparing students for a variety of tests in American History. Teacher's guide.

AMERICAN HISTORY ACHIEVEMENT 2: 1860-1900
1 Apple II Diskette, 48K; Backup.....$49.95
Same as above except for period covered. Teacher's guide.

AMERICAN REVOLUTION
APPLE II DISKETTE J H

3 Apple II Diskettes, 48K.....$165.00
Interactive-tutorial programs. Teaches the student about the origin of the American nation. Provides a historical perspective for understanding the war which led to our nation's independence. **Age of Discord (1763-1775)** - historical time frame, geographical setting, Stamp Act of 1765, colonial reaction, Boston Tea Party, others. **War of Independence (1775-1776)** - character of the war, colonial frustrations, war in the North, Declaration of Independence. **Saratoga and the French Alliance (1777-1783)** - turning point - Saratoga, birth of the American Navy, aid comes from Europe. Documentation.

AMERICAN HISTORY AND GOVERNMENT QUIZ
APPLE II DISKETTE J H

Complete Series (4 Sets, 4 Diskettes).....$84.00
Each set contains 400 questions and answers, arranged by topic, in multiple choice, true/false, fill-in and short answer formats. Two games included on each disk. Immediate feedback and opportunity for review. User's guide.

AMERICAN HISTORY QUIZ 1
1 Apple II Diskette, 32K.....$27.00
Early Explorations, Colonial Period, American Revolution, Confederation, 1789-1817, 1817-1853.

AMERICAN HISTORY QUIZ 2
1 Apple II Diskette, 32K.....$27.00
1853-1861, Civil War, 1861-1877, 1877-1913, 1913-1933, 1933-1953, 1953-1969, 1969-1982.

AMERICAN HISTORY QUIZ 3
1 Apple II Diskette, 32K.....$27.00
Native American History, Old West History, American Military History, Famous Americans, Presidents.

GOVERNMENT QUIZ
1 Apple II Diskette, 32K.....$27.00
Forms and History of Government, Declaration of Independence, Articles of Confederation, American Constitution, Amendments, Separation of Powers, Executive Branch, Legislative Branch, Judiciary, Government Agencies, Election and Voting, Citizenship, Local Government, Law and Legal Terms, International Relations.

AMERICAN PEOPLE
APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$39.00
Trivia game with 6 categories: Famous Women, Sports, Explorers, Inventors, Arts, and At War. Designed for one or two players or teams. Students get to "wager" as they answer questions about categories of their choice. Questions vary in difficulty and value. Computer rewards the winner with a "check" for the amount of money won. Backup; Teacher's guide.

CHOICE OR CHANCE
APPLE II DISKETTE J

2 Apple II Diskettes, 48K; Student Workbook.....$111.00
Helps junior high students focus on the role that geography played in shaping people's decisions and ultimately the course of recorded history. Covers three eras in history -- Exploration and Colonization, Expansion Era and Industrialization. Henry Hudson, DeSoto and other major world explorers come alive as students have a chance to react to some of the challenges faced by those who settled our country. Students get to identify problems and make choices, comparing their results in the context of recorded history. Includes teacher's guide and black-line master Student Workbook.

COMPUTERS IN GOVERNMENT
APPLE II DISKETTE J

1 Apple II Diskette, 48K; Backup.....$36.00
Introduces students to the way computerized information is collected, stored and used by the United States government. Students examine the government agencies that use computers and the various kinds of information they collect. The computer program **Population** enables students to alter the birth rate, mortality rate and birth distribution of four countries and to observe the changes in population composition displayed in graph form. Students analyze the demographic data and use it to make policy recommendations as they participate in a cabinet meeting simulation. Teacher's guide.

CONSTITUTION OF THE UNITED STATES
APPLE II DISKETTE J H

5 Apple II Diskettes, 48K.....$255.00
Interactive-tutorial programs. Teaches the student about the origin of the Constitution. It presents the document in its entirety, including the Amendments. Student reads each part of the Constitution as originally written and then receives an explanation and questions before going on to the next part. **Age of the Constitution** - American Revolution, Declaration of Independence, Confederation of State, framing the Constitution, convention goes to work, ratification. **Preamble and Article I** - Preamble, Legislative branch, Article I, Section 1-6, Summary. **Legislative Branch** - Article I, Sections 7-10. Articles II-VII. **Amendments to the Constitution** - introduction, Bill of Rights (Amendments 1-10), questions on the Bill of Rights, Amendments 11-26, summary and test. Teacher's guide.

CONSTITUTIONAL AMENDMENTS
APPLE II DISKETTE J H

1 Apple II Diskette, 128K.....$49.95
Master Teachers Series. Topics covered: Bill of Rights, Amendments 11-18, and Amendments 19-26. Students will learn: how the Constitution is organized; what the Bill of Rights is, why it was added, how it protects individual rights; the purpose of amendments 11-18, when slavery was abolished, when Congress got the right to tax citizens; and why amendments 19-26 were added, how women got the right to vote. Requires color monitor. Teacher's guide.

EARTHQUAKES/LATITUDE-LONGITUDE
APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$29.95
Hands-on experience in plotting earthquakes and latitude-longitude lines is provided. The use of Hi-res graphics, sound, and color "flash" enables the program to depict the location and intensity of hundreds of earthquakes on a world map and to show related geographical features. The section on latitude-longitude allows students to plot locations on a map of the world. Teacher's guide.

ECONOMICS
APPLE II DISKETTE H

5 Apple II Diskettes, 48K; Backups.....$159.00
Interactive exercises and review questions. **What Is Economics?** - Presents the meaning of economics and the concepts of "needs", "wants", and "factors of production". **Economics: Definitions and Laws** - Beginning with the Law of Scarcity, students learn about the fundamental questions every economics system has to answer: production possibilites, opportunity costs, and supply and demand. Includes charts and graphs. **Economic Systems: Traditional, Command, Market** - Shows how these systems deal with the basic questions of economics. **Capitalism, Communism and Socialism** - Compares 3 dominant economic systems and examines the following concepts within the framework of the 3 systems: use of capital goods, labor, planning, profit, and role of government. Graphs, models and exercises provided. **Teacher's Class Demonstration: Economics Models** - Contains the major graphics and models from previous four programs. Teachers can select models and graphics of their choice for use in class demonstrations. Includes: law of scarcity, production possibilities, supply and demand, factors of production, needs and wants, functions of money, role of labor and comparisons of economic systems. Excellent Teacher's Lesson Planner with complete synopsis of material for review before presentation to students.

EUROPEAN NATIONS AND LOCATIONS
APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$44.95
Venture to Europe without leaving your home and discover where European nations, history, cities, current events and geographical landmarks are located. An ideal way for kids to learn European facts and it allows teachers to add their own questions. Includes a complete map of Europe as well as four regional European maps. Students will learn country names, capitals, bordering nations, geographic landmarks, major mountain ranges, rivers and lakes, historical and cultural facts and where they belong on a map in a fun and challenging game. Teachers can vary the difficulty levels of both game play and geography skills independently to provide continued challenge for users of different abilities. User's guide.

FAMOUS NAMES IN AMERICAN HISTORY
APPLE II DISKETTE J H

1 Apple II Diskette, 32K; Backup.....$50.00
Students are given clues to the identities of famous people in American history and try to guess the name. Student may run the program alone as a drill or compete against another student. Review section allows students to look at the names and clues. Drill and practice section quizzes the students on the historical figures. Includes: **Exploration and Colonization** - from 1000 A.D. through the early 1700's. **Revolutionary War and the War of 1812** - heroes, traitors, and memorable characters from both sides of the 2 wars. **Westward Expansion** - exploration and expansion from the late 1700's through the 1860's. **Civil War** - leaders and heroes from both sides. **Industrial Revolution** - industrial giants and early labor leaders. Backup; teacher's guide.

FOOD FACTORY
APPLE II DISKETTE J H

1 Apple II Diskette, 32K; Backup.....$50.00
An economics simulation game with high student involvement. Uses the concept of the student selling food to his campus community and making resulting decision in food selection, pricing, and marketing. Concepts presented are: Supply and Demand Analysis, Opportunity Costs, Capital Goods Investment, Resources Allocation, and more. Notes.

GAME OF THE STATES
APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
5 games in 1. Students test their skills with the 50 states. They learn to recognize the states, their capitals, abbreviations, relative locations, and major cities. Teacher's guide.

S E P I J H C A **LEVELS**
S - Special Needs
E - Early Learning
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I - Intermediate Grades
J - Junior High
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C - College
A - Adult

GAME OF THE UNITED STATES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$45.00

Offers practice in identifying the location of the various states within the United States. In the review mode, a map of the United States is drawn. The various states are highlighted one at a time to emphasize their location. In the drill and practice mode, the shape of a state is shown on the screen. If the student is unable to identify the state based on the shape, the state is highlighted on the United States map. Teacher's guide.

GEOGRAPHY ADVENTURE USA

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$45.00

A foreign agent is at large. Use your wits, geography knowledge and game skills to nab the slippery spy before he escapes with vital national secrets. Contains more than 1400 U.S. geography facts or teachers may customize the program and insert their own geography clues. Combines a colorful high resolution adventure game and fast arcade action. An entertaining activity of real educational value. Teacher's guide.

GEOGRAPHY QUIZ SERIES

APPLE II DISKETTE J H

Complete Series (3 Sets; 3 Diskettes).....$63.00

Each set contains 400 preprogrammed questions and answers, arranged by topic, in multiple choice, true/false, fill-in and short answer formats. Two games are included on each disk. Immediate feedback and opportunity for review. User's guide.

GEOGRAPHY QUIZ 1: BASICS
1 Apple II Diskette, 32K.....$27.00

Maps and Map Reading, Continents, Oceans, Seas, Islands, Lakes, Rivers, Deserts, Mountains, Latin American Geography.

GEOGRAPHY QUIZ 2: REGIONS
1 Apple II Diskette, 32K.....$27.00

United States Geography, National Parks and Monuments, Canadian Geography, Middle Eastern Geography.

GEOGRAPHY QUIZ 3: REGIONS
1 Apple II Diskette, 32K.....$27.00

Australian Geography, New Zealand Geography, African Geography, Asian Geography, European Geography.

GLOBE MASTER II

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$39.95

Contains 9 hi-res full color maps (U.S., Europe, Asia, Africa, South America, Australia, World, Canada, U.S. Topographicals) and hundreds of questions about states, capitals, countries, landmarks and history, Use as a game with scoring, as a review, or to prepare for a test.

GO TO THE HEAD OF THE CLASS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

Highly competitive general knowledge game. Players advance from desk to desk by giving correct answers to vocabulary, math, geography, or history questions. Three levels of play: Junior, Senior, Graduate. For ages 8 and up. Teacher's guide.

GREAT MAINE TO CALIFORNIA RACE

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$29.95

Geography game in which two dragsters racing from coast to coast move forward or backward depending on the players' ability to correctly answer questions about state capitals, sizes, boundaries, products, geographic features and other facts. Option to play against the computer. Ages 10 and up. Teacher's guide.

HISTORY AND GEOGRAPHY

APPLE II DISKETTE I J

1 Apple II Diskette, 32K; Backup.....$50.00

Regions of U.S.A. - A drill and practice exercise where the user is asked what region of the United States randomly selected states are located in. **States and Capitals** - This program drills the student on randomly selected states and their capitals. If the student does not know the capital, the computer offers clues to determine the capital. **Presidents** - A drill and practice on presidents of the U.S. Questions such as who was 26th president, what president left office in 19xx, what president took office in 18xx, and so on. **Country** - A drill and practice on countries and the continent they are located in. **Revolutionary War Quiz** - Two players compete in answering questions on the Revolutionary War. Backup and teacher's guide included.

HISTORY, ECONOMICS AND GEOGRAPHY SIMULATIONS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$48.00

Provides students with real-life situations that teach them a variety of skills. **Civil** simulates 14 battles of the Civil War. One student may assume the role of the Confederate commander while another student assumes the role of a Union commander as they learn to weigh the problems faced by a commander in the Civil War. In **Sell Apples**, a lesson on pricing, students decide how much to charge for apples. In **Sell Bicycles**, a simulation in economics, two students manage different bicycle shops. **Sell Lemonade** is a simulation in which students make decisions similar to those they would make running a real lemonade stand. **Sell Plants** is a simulation emphasizing the function of advertising in business. **States** is a drill and practice on the names and spellings of United States capitals. These programs can be used as class demonstration to introduce a lesson or as a unit of study. Teacher's guide.

KEEPING SAFE: A PERSONAL SAFETY PROGRAM

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$49.95

An innovative computer program that shows youngsters as young as five how to select the best response in various simulated encounters. "Buddy" and "Sally" face many potentially dangerous situations, from answering the telephone when they're alone, to noticing a stranger is following them. By helping Buddy and Sally make wise choices, the student using the program learns to discriminate between appropriate and inappropriate adult interactions in a depersonalized situation, i.e., "keeping Sally safe" or "keeping Buddy safe". Brilliant graphics, and reinforcing or correcting feedback are included. The student will be rewarded for using the program, whether the answers are right or wrong, with a generous amount of time to use an action and graphic-packed game "Scuba Scramble". Teacher's guide.

LANGUAGE OF MAPS SERIES

APPLE II DISKETTE I

Complete Series (2 Sets; 2 Diskettes); Backups.....$159.00

Helps students acquire greater skills in the use of maps and map languages. Tutorials, interactive learning activities, high-resolution graphics, and student worksheets. Backup; teacher's guide each set.

LANGUAGE OF MAPS: SURFACE OF THE EARTH
1 Apple II Diskette, 48K; Backup.....$99.00

Oceans and Continents - With the help of colored maps on the computer screen, students will see how maps use color, symbols, and other map languages. **Land Areas and Water Bodies** - Presents major land areas and bodies of water. **Highlands and Lowlands** - Makes it easy for kids to see how land elevations appear on a flat map. They will work with different types of map keys and a variety of map symbols.

LANGUAGE OF MAPS: LOCATION AND DISTANCE
1 Apple II Diskette, 48K; Backup.....$99.00

Finding Your Way on Maps - Includes: How to determine location and distance on maps, the Poles, the Equator, the Prime Meridian, and the International Date Line. **Finding Places on Maps** - Helps students understand the concepts of location and distance, intermediate directions, meridians, parallels, time zones and using degrees as a tool for locating places on maps. **Measuring Distances on Maps** - Introduces the use of scales as a tool for determining distances on maps.

MARKETPLACE

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$45.00

Introduces students to the basics of "Supply and Demand" and affords drill and practice in recognizing the impact of varying curves on market price and quantity. Backup; Teacher's guide.

MEDALISTS SERIES

APPLE II DISKETTE I J

"...good use of graphics...program adaptable to many grade levels." **Software Reports, 1984.**

This challenging series encourages students to study and learn important facts about different subjects. A great motivator for classroom research. Clues (facts) at varying levels of difficulty have been included for each famous person, state, ocean, or continent. The student "buys" clues to help him/her try to guess what individual or place the computer has chosen. Students who can guess the answer by using only the most difficult clues are the winners (Medalists). Student may compete against his own best record or the top 3 students. All students' records are stored for the teacher, but only the three best players' scores are shown to other challenging students. The strength of these programs is the variety and depth of the content and the ability of the teacher to continually change the clues, and point values. Teacher's guide with each set.

MEDALISTS: BLACK AMERICANS
MEDALISTS: CONTINENTS
MEDALISTS: PRESIDENTS
MEDALISTS: STATES
MEDALISTS: WOMEN IN HISTORY

(Each title, 1 Apple II Diskette, 48K.....$39.95)

MEET THE PRESIDENTS

APPLE II DISKETTE J H

4 Apple II Diskettes, 48K.....$39.95

"...effective and motivating piece of instruction for getting to know the Presidents." **Educational Technology, Sept 1982.**

Questions that test the student's knowledge accompany a portrait of each president. Questions can be changed by the teacher to include any subject matter.

MEMORABLE AMERICANS

APPLE II DISKETTE J H

1 Apple II Diskette, 32K; Backup.....$45.00

Students are given clues to the identities of famous Americans and try to guess their names. Student may run the program alone or with another student as a game. Review section allows students to look at the names and clues. Includes: Inventors and Inventions; Presidents; Black Americans; American Women.

MILLONAIRE, THE STOCK MARKET SIMULATION

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$49.95

"...a realistic, entertaining simulation of stock-market trading that teaches the basics of investing." **Personal Software, Feb 1984.**

Stock market simulation game based on actual stock market trends - not just random numbers. Players start out with money but only a few hundred shares of stock. They then buy or sell stocks or options, buy on margin or borrow money against their net worth, if necessary. They pay broker's commissions and taxes. They have business information on the different companies, news reports for the week, industry averages, week's high, low, close and change. Very realisitc and fun to play. Recommended for junior or senior high math or economics classes, as well as anyone interested in the stock market. One of the best stock market simulation games available. User's guide.

POLLS/POLITICS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$36.00

Introduces the student to political polls, their history, and politics, and the criteria needed to judge them. This unit also shows how computers have become a key component in polling techniques. Not only will students read about computer usage, but they will also have an opportunity to use the computer to analyze survey data they have created. Includes handouts, transparencies, and a quiz. Teacher's guide.

SEARCH AND RESCUE: GEOGRAPHY SKILLS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$49.00

Helps students understand and apply the basic geographic concepts of direction, longitude and latitude. A challenging game which asks the student to locate the cities and countries in which a stolen object is being held, and then to travel to various points on the world map to collect the ransom items. Students must indicate direction to travel using either compass directions or longitudinal and latitudinal coordinates. Three levels of difficulty. Backup; teacher's guide.

SOCIAL STUDIES SIMULATIONS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$49.00

Furs - simulates the fur trade as it was carried on in eastern North America in the 1770's. **Nomad** - develops map reading skills using a game format. **Oregon** - simulation, originally developed at MECC, of a trip by covered wagon as it might have occurred enroute from Independence, Missouri to Oregon City in 1847. **Sumer** - combines role-playing and economics as you become king of an ancient kingdom. **Voyageur** - simulation of the transportation of furs by canoe in northern Minnesota and southern Ontario in the early 1800's. These programs can add excitement to a geography, history, or economics lesson. Use as an introduction to a lesson or build a unit around any of the five programs. Teacher's guide.

STATES AND TRAITS

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$44.95

This game combines U.S. geography, history and current trivia. Move states to their proper locations on a map of all the states or just a region. Position the states with state boundaries or only mountains and rivers to guide you. Or play the numerous traits games and identify where the information belongs on the map. Traits games include bordering states and rivers, historical facts, current trivia and capitals. "In which state was there a confederate and union capital in the last year of the Civil War?" "Which state is famous for the hogs outnumbering the people 5 to 1?" Design your own games using built-in symbols, such as trees and factories, that you can easily place on the maps, plus add your own questions. An ideal way to teach U.S. geography and social studies. Multiple skill levels. Teacher's guide.

STATES, CAPITALS AND PRINCIPAL CITIES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

Highly interactive guided drill in basic U.S. Geography skills. Motivates students with an arcade style reward game, give teachers control over several aspects of the program, and includes a student management system. Exercises cover state's map location; name and abbreviation; capital city; locations of principal cities; and regional maps.

STATES GAME

APPLE II DISKETTE I J H

1 Apple II Diskette, 16K.....$60.00

This land is yours. Blueberries in Maine, giant redwoods in California, peanuts in Georgia, tacos in Texas. Each of our fifty states has its own personality, history and terrain. Learn hard facts while guessing the states from descriptive clues. Five different games, one to four players. User-friendly, animated graphics. Comprehensive teacher's guide.

TIME/SEASONS *See SCIENCE in this section.*

TIME TUNNEL: AMERICA SERIES

APPLE II DISKETTE I J

Complete Series (3 Sets, 3 Diskettes); Backups.....$179.00

The Time Tunnel Master is waiting to send your students back in time until they are face-to-face with important people who helped shape American history, But who are these men and women? Students will have clues such as: the date, the surroundings, an important newspaper headline, a well-known companion of the person, an activity going on, and many more. As your students gather information about the person, they must put the pieces of the puzzle together and arrive at a conclusion as to who this person is. Students will want to play The Time Tunnel again and again. Backup; teacher's guide with each set.

TIME TUNNEL: AMERICA - EARLY AMERICA

1 Apple II Diskette, 48K; Backup.....$69.00

Age of Exploration - Students will meet the bold explorers who opened the eyes of the Old World to the New World. For example, they will be there when Ericson first sets foot on Vinland, when Columbus catches his first glimpse of the "Indies", and when Henry Hudson falls victim to mutiny on Hudson Bay. **Birth of a Nation** - A new nation is born and your students will meet William Penn during his one day ride through Penn's Woods and James Oglethrope as he lands in the New World with a boatload of British prisoners at what is now Georgia. Your classes will watch Sam Adams fan the flames of an American Revolution and Benjamin Franklin fly a kite, and many others.

TIME TUNNEL: AMERICA - NATION EMERGES

1 Apple II Diskette, 48K; Backup.....$69.00

Growth of a Nation - introduces you to many of the people who helped the U.S. to change and grow. Includes: Lewis and Clark, Robert E. Lee, Alexander Graham Bell, and Mark Twain. **Twentieth Century** - Watch Henry Ford put America on wheels; Jane Addams founding Hull House; Jackie Robinson step up to the plate at Ebbett's Field; Neil Armstrong take man's first step onto the moon; and Martin Luther King's dream.

TIME TUNNEL: AMERICA - PRESIDENTS

1 Apple II Diskette, 48K; Backup.....$69.00

Students will meet each of our nation's presidents. They won't know who it is without the help of clues. But by observing, listening, reading, reasoning, the identity of the unknown president will become more clear. Your student won't just be learning History, they will be using their thinking skills. Two levels of difficulty.

TRAVELS WITH ZA-ZOOM: U.S. GEOGRAPHY

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup; Maps.....$79.00

A fun and challenging way to learn U.S. Geography. The Geography Genie, Za-Zoom, will whisk your students over different states in the U.S. but they won't be told where. Your class will make observations to determine which state they are in: people's clothing, their food, various landmarks, climate conditions, bodies of water, famous cities, and much more. They must use their knowledge together with their thinking skills to determine where they are. Includes: backup, teacher's guide, a full-color wall map and a tablet of notebook maps.

U.S. CONSTITUTION: GUARANTEE OF LIBERTY

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$49.95

Master Teachers Program. Important topics include: Constitution and Preamble, Articles I-VII and The Bill of Rights. Your students will learn: the role of the U.S. Constitution in our government; what the three branches of our Federal government are, and the purpose of each; the importance of the seven articles of the Constitution, the main points of each; and the amendments, how they guarantee our rights to worship or not. Teacher's guide.

U.S. GEOGRAPHY AND HISTORY

APPLE II DISKETTE I J

4 Apple II Diskettes, 48K.....$100.00

Students practice using a map of a small town, determining distance between buildings, and learning about the various activities associated with each building. Moving up to a map of the U.S., the student learns locations of major cities, within the states which are clearly outlined and labled (puzzle included in this one). A "history game" between two students or teams is played out while students learn and review many topics of American history.

U.S. HISTORY: THE YOUNG REPUBLIC

APPLE II DISKETTE J H

2 Apple II Diskettes, 48K; Backups.....$89.00

Game format. A shooting gallery provides opportunities for sharpshooters to test their knowledge about the **Thirteen Colonies.** Students can compete against each other or the computer in an auto race as they see who is more of an expert on **Pre-Revolutionary Colonial Life in America.** A trophy awaits the first person to cross the finish line. Correct answers about the **American Revolution** allow students to select climbing tools to help them scale Focus Mountain. Comprehensive teacher's guide with complete synopsis of each game.

U.S. PRESIDENCY PACKAGE

APPLE II DISKETTE J H

Complete Series (3 Sets, 5 Diskettes); Backups.....$159.00

Examines the nature and scope of the office of the presidency. Interactive test, simulations, role playing and high-resolution graphics. Backup; teacher's guide with each set.

U.S. PRESIDENCY: AN INTRODUCTION

3 Apple II Diskette, 48K; Backup.....$99.00

Lets your students explore the nature of the Presidency, including the roles and powers of the office, and an evalution of the various types of presidential leadership. Includes: Nature of the Office; Presidential Roles and Uses of Power; and Organization of the Presidency.

WHO CAN BE PRESIDENT

1 Apple II Diskette, 48K; Backup.....$39.00

Let every one of your students use this program to see how likely it would be that they could become President of the United States if they wanted to. First they will study the types of people who have become President so far. Then they will answer a series of questions based on their background and preferences (e.g., geographical location, desired occupation, desired marital status, desired political experiences, etc.) in order to compare their answers with the backgrounds of the people who actually became President.

EVALUATING PRESIDENTIAL LEADERSHIP

1 Apple II Diskette, 48K; Backup.....$49.00

Lets your students analyze, evaluate, and rate any or all of the men who have served as president of the U.S. They will perform research on presidential administrations, including their successes and failures. Data and other research are recorded on worksheets, entered into the computer, and the results are then visually analyzed by the computer. Printout optional.

UNLOCKING THE MAP CODE

APPLE II DISKETTE I

2 Apple II Diskettes, 48K; Workbook.....$111.00

"...excellent interactive use of the computer...allows students to develop the skills necessary to use maps to communicate." **Teaching and Computers, Feb 1985.**

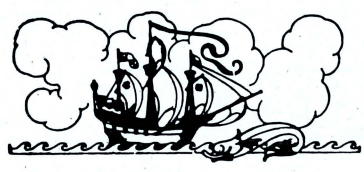
Designed to supplement geography instruction in 4th - 6th grade. High resolution color graphics introduce students to basic map and globe skills including Land and Water Forms, Interpreting Color and Map Symbols, Direction, Location, Scale and Time. After mastering six map and globe skill exercises, students can apply their knowledge to the Simulated Flight Plan. Mountains, limited fuel and other obstacles challenge young navigators who can choose from twelve different flight plans of varying difficulty. Set includes teacher's guide, and a black-line Master student workbook.

WORLD WAR II

APPLE II DISKETTE H

1 Apple II Diskette, 48K; Backup.....$45.00

Famous Names from World War II. Students are given clues to the identities of famous heroes and villains of World War II. Student then tries to guess the identity of the individual. Student may run the program alone as a drill or compete against another student. Contains a drill/quiz section and a review section. Includes: Famous Places/Battles from World War II, Countries of World War II, Planes and Ships of World War II.



FOREIGN LANGUAGE

FRENCH/SPANISH ACHIEVEMENT

APPLE II DISKETTE H C

Learning Computer Software Award, Jan 1984. Recommended. **Booklist, Jan 1, 1984.**

Provides practice in one vocabulary format of the French or Spanish Acievement Examinations. The student is given a sentence with a word omitted. From a choice of four options, he must select the appropriate word. In addition to an English translation of the original sentence, the student can see an explanation of each option. He/She also receives encouraging remarks in French or Spanish to indicate progress. After twenty problems, the student is given an Achievement score and a list of the words missed in their dictionary form along with their English meaning. Other features of the program include: full instructions, full French or Spanish Character set, ability to skip a problem and return to it later, an option to have the problem chosen randomly or to move sequentially through the data bank. Excellent for both group and individual instruction.

FRENCH ACHIEVEMENT I

Included in Minnesota State Department of Education High Quality Courseware List, 1984.

1 Apple II Diskette, 48K; Backup.....$49.95

FRENCH ACHIEVEMENT II

1 Apple II Diskette, 48K; Backup.....$49.95

SPANISH ACHIEVEMENT I

Included in Minnesota State Department of Education High Quality Courseware List, 1984.

1 Apple II Diskette, 48K; Backup.....$49.95

SPANISH ACHIEVEMENT II

1 Apple II Diskette, 48K; Backup.....$49.95

VOCABULARY WORKSHOP SERIES

APPLE II DISKETTE I J H

A user/teacher-controlled drill-and-practice tool for use in modern foreign language classes. **Features:** A game format helps make vocabulary review easy and fun. New words can be conveniently added; words which are too "easy" can be deleted. Up to 20 specific word lists with up to 50 words per list can be included on one disk. Includes commonly used accent marks.

VOCABULARY WORKSHOP: SPANISH

1 Apple II Diskette, 64K.....$49.95

VOCABULARY WORKSHOP: FRENCH

1 Apple II Diskette, 64K.....$49.95

VOCABULARY WORKSHOP: GERMAN

1 Apple II Diskette, 64K.....$49.95

DRIVER'S EDUCATION

RULES OF THE ROAD

APPLE II DISKETTE J H

Complete Series (4 Sets, 4 Diskettes).....$199.00

Good overall instruction in driving regulations. Prepares students for the written drivers license test. The material was adapted from the Uniform Motor Vehicle Code and is applicable to traffic laws and regulations throughout the United States. The courseware is tutorial in nature, requiring the student to demonstrate comprehension throughout the lessons. Each lesson is followed by a Mastery Test to determine overall competency. The results of the mastery test are stored on the diskette. A "teacher menu" permits the instructor to access the individual concepts within the lesson. Interactive, branched instruction. High-resolution graphics. Comprehensive documentation.

TRAFFIC SIGNS

1 Apple II Diskette, 48K.....$60.00

Covers: traffic signs; shapes of signs; colors of signs; regulatory signs; two-way left turn lanes; warning signs; school signs; construction and maintenance signs; guide signs.

TRAFFIC SIGNALS AND MARKINGS

1 Apple II Diskette, 48K.....$60.00

Covers: traffic signals and markings, flashing signals, pavement markings, traffic control signals, lane signals, other markings.

TRAFFIC LAWS

1 Apple II Diskette, 48K.....$60.00

Covers: traffic laws, right of way, pedestrians, other drivers, passing and lane usage; turns and signals, speed, special stops.

SAFETY RULES

1 Apple II Diskette, 48K.....$60.00

Covers: safety rules, night driving, curves, turning, blowouts, safety belts, fog, hydroplaning, skidding, winter driving, running off the pavement, speed and stopping distance, vehicle interval, expressway driving, motorcycles and bicyles, railroad crossings.

BUSINESS EDUCATION

BUSINESS EDUCATION SERIES

APPLE II DISKETTE H C A

BUSINESS EDUCATION 1

1 Apple II Diskette, 32K; Backup.....$45.00

Loan Amortization - A complete loan analysis program that will calculate either payment amounts, number of periods, rate of interest, length of the loan, or interest, and print an amortization schedule. **Bank Reconcillation** - Accepts the beginning bank balance, checkbook balance, checks written, outstanding checks, charges, and reconciles a bank statement. If the reconciliation is off, you may review and modify the outstanding checks, checks written, etc. **Stock Market Simulation** - Simulation where players buy and sell stocks with the objective being to increase their net worth. The simulation allows selection from stocks that fluctuate in price based on market indicators such as prime interest rate, inflation, economic outlook, etc. **Depreciation** - Will calculate depreciation according to the straight line, double declining balance, and sum of the years digit methods and print a depreciation schedule.

BUSINESS EDUCATION 3

1 Apple II Diskette, 32K; Backup.....$45.00

This program offers a very complete and quite sophisticated computerized general ledger accounting system. It requires that your computer be equipped with at least one disk drive and an 80 column printer. The system comes with an established chart of accounts and account balances. The student can open new accounts, change account titles, delete accounts, make journal entries, correct unposted journal entries, print a trial balance, print an income statement, close out the accounting period, and print a balance sheet, The initial chart of accounts and balances may be restored at any time. Also, you may create an empty chart of accounts and create your own accounting system. The program includes two projects with solutions.

BUSINESS EDUCATION SENIOR HIGH

APPLE II DISKETTE H A

BUSINESS EDUCATION: ACCOUNTING

1 Apple II Diskette, 48K; Backup; Answer Key.....$49.00

Provides realistic experience with a computerized accounting system. Designed to supplement an advanced or second-year accounting class. The package consists of four integrated systems: general ledger, accounts payable, accounts receivable, and inventory control. Contains a prepared set of account vendors, outstanding vouchers, customers, outstanding invoices, and inventory items for a hypothetical company. Students use a series of projects and processing cycles from the teacher guide as they learn the four systems. An accompanying answer key contains test answers, correctly completed input forms for each project, and all reports and proofs completed by students as part of the project. Requires a dual disk drive and a 132-character printer. Teacher's guide.

BUSINESS EDUCATION UTILITIES

1 Apple II Diskette, 48K; Backup.....$45.00

A collection of very practical programs, useful in a number of business education settings. Some topics covered by the tutorials and problem-solving programs on the diskette are interest on installment buying, effects of simple and compound interest, loan amortization, business financial reports, money supply, payroll, and the 1040A tax form. Support materials provide worksheets and input forms. Teacher's guide.

HOME ACCOUNTANT: *See HOME ECONOMICS in this section.*

KNOWARE: AN INTRODUCTION TO BUSINESS COMPUTERS

APPLE II DISKETTE H C A

3 Apple II Diskettes, 48K.....$95.00

"...best tool for reducing computerphobia you can buy." **InfoWorld, March 19, 1984.**

Truly a Learning Game. Fun, easy to understand, yet surprisingly educational. Starts player out as a company mail clerk with the ultimate goal of becoming chairman of the board. Along the way, the program gently introduces six common business applications: simple graphic commands, BASIC programming, data-base management, spreadsheet uses, word-processing/text editing and financial decision making. While simply playing a game, the user familiarizes himself with the applications while advancing in the company. Requires absolutely no prior computer experience. Instructions are all contained in a step-by-step manner on the disk - no complicated manual to struggle through. There is even help from the "experts" when you need it. Easy to use and a lot of fun as the computer helps you every step of the way on the road to becoming a millionaire.

JUNIOR TYPER

APPLE II DISKETTE P I

2 Apple II Diskettes, 48K; Backup.....$45.00

A beginning typing program designed specifically for grades K-6. Teaches touch typing skills with the aid of innovative graphic devices that show the correct fingering for each letter. Students practice typing drills that use colorful graphic reward to make the work a little easier as they develop accuracy and speed. Teacher's guide.

LEARN-TO-TYPE (Keyboarding)

APPLE II DISKETTE I J H A

1 Apple II Diskette, 48K.....$34.95

Teaches beginning typing skills, including correct finger position. Starts with one-key practice and advances to groups of letters and words. Computer keeps track of and provides drills on keys that give most difficulty. Includes timed test drill section that tabulates number of words typed, number of errors, and computes wpm scores. *NOTE: to utilize the special features of the Apple IIe with this program, please specify Apple IIe Version when ordering.*

LEARN-TO-TYPE-PLUS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$49.95

All the features of Learn To Type, plus delightful graphic rewards and complete record keeping. Teacher's guide. *NOTE: To utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.*

MASTERTYPE IMPROVED

APPLE II DISKETTE I J H A

2 Apple II Diskettes, 48K.....$39.95

Improved educational typing program now has the elements of a traditional touch-typing course in addition to being the most entertaining way ever to learn to type. Includes a second diskette of finger positioning drills and games to increase your typing speed and accuracy. User's guide.

TYPING

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95

1 Apple II Diskette, 48K; Backup.....$54.95

Provides guided drill and practice opportunities in basic typing skills as well as a test which determines students' typing speeds. The disk employs an arcade-style reward game to motivate students, gives teachers control over several aspects of the program, and includes a student management system. Lessons include: Home Row, Top Row, Bottom Row, Upper Case, Numbers, and Speed Test. Teacher's guide.

TYPING MICRO-TUTOR

APPLE II DISKETTE J H C A

1 Apple II Diskette, 16K.....$24.95

"...adds interest to a repetitious drill and encourages the student to keep trying..." **Apple Journal of Courseware Review, Issue I.**

Designed to improve typing skills. Time Response Monitor evaluates typist's response to each key. Automatically adjusts to give more practice on keys which are less familiar, completely individualizes drills for increase of speed and accuracy. Easy-to-use. Provides non-threatening feedback. Displays speed, accuracy percentage, and number of mistakes. Teacher's guide.

TYPING TUTOR III WITH LETTER INVADERS

APPLE II DISKETTE I J H A

1 Apple II Diskette, 64K.....$49.95

"...ideal coach..." **Personal Software.** *"...most miraculous of programs..."* **Whole Earth Software Catalog.**

Typing Tutor III program is already recognized as a classic. Starting with the "home row" keys – asdfjkl; – the program gives the user the choice of two drills: alphabet keys and number keys. It reports the user's raw speed in words per minute, number of errors, and corrected speed. Then, it automatically adjusts to the user's abilities and progress, creating custom-designed lessons. Through the *Time Response Monitoring®* process, it calculates speed and accuracy on each key. When a threshold level has been reached, the program moves on to other keys. It tests the user on words, numbers, and the full keyboard. Also features *Letter Invaders* an arcade-style game that enables the user to take an entertaining break from the program and sharpen typing skills at the same time. *Letter Invaders* automatically adjusts to the user's skill -- as the player gets better, the game gets faster. User's guide.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

TYPING STRATEGY

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K.....$39.95

"Its immediate visual feedback has the net result of building good habits right from the start." Software of the Month. **Personal Computing, April 1983.**

Teaches you to type as quickly and accurately as a professional typist. Animated hands and keyboard show you which key to press and which finger to use. Games and exercises help to increase your speed and accuracy.

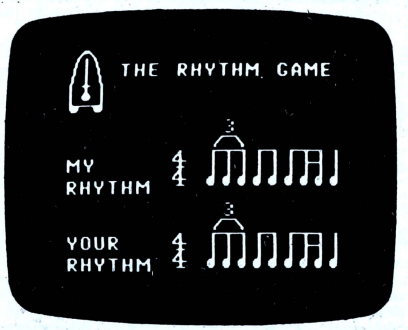
WIZARD OF ID'S WIZTYPE

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$34.95

Teaches computer keyboard skills with famous cartoon characters, the Wizard of Id and Spirit. Includes sentence and paragraph typing, adjustable speed and several different types of practice drills. Notes.

MUSIC



MAGIC PIANO

APPLE II DISKETTE I J H A

1 Apple II Diskette, 48K; Workbook.....$49.95

For new or experienced students of music. Three exciting music games and a 64-page music workbook designed for musicians of all ages and abilities. The **Magic Piano** plays, records, and automatically scores your musical compositions. Save your work on disk or prints it on your printer. **Rhythm Game** develops and sharpens intermediate and advanced rhythmic skills. Choose from beginning to advanced levels. The **Melody Game** improves tonal memory and provides interval training. Hear and repeat melodies conforming to rules of counterpoint from two to nineteen notes. **Music Workbook** expands on the musical concepts and lets you practice on paper what you experience on the screen. Explores the three basic areas of music: composition, rhythm, and melody. Printer useful but not required. Teacher's guide.

MUSIC READINESS: PITCH AND RHYTHM

APPLE II DISKETTE E P

2 Apple II Diskettes, 48K; Student Guide.....$69.95

Eight programs in game form, each designed to teach a specific musical concept. A child may choose, from a menu on each disk, the game he/she wishes to play; however, the games are ordered so that the concept skills build upon one another. Designed for children with no previous music study. Includes: pitch discrimination; pitch direction; discrimination of intervals; four types of notes and note values. Teacher's guide.

MUSIC TEACHER: THE NOTABLE PHANTOM

APPLE II DISKETTE P I

1 Apple II Diskette, 48K; Keyboard Overlay.....$49.95

Students learn to play a keyboard instrument and to read music with the fun of ghosts, spiders and The Notable Phantom. Teaches the note names and positions. Provides ear training. Allows children to learn at their own pace. They can play one of the games, compose, save, play and display their own tunes. Includes a piano keyboard overlay. User's guide.

SONGWRITER

APPLE II DISKETTE P I J H

1 Apple II Diskette, 48K; Cable.....$39.95

Included in A+ Software Supplement...More than 70 educational programs recommended by teachers. *"...can turn even the most inexperienced musician...into instant songwriters...allow use musical tools in a musical way, while taking advantage of the unique capabilities of the computer."* **Electronic Learning, April 1984.**

Have fun and compose music at the computer while you learn music theory. Create your own songs or edit and improvise from SONGWRITER'S library of songs. Colorful graphics. Includes cable link computer to stereo.

ADULT BASIC EDUCATION

High interest, controlled vocabulary programs especially suitable for older Basic Education students.

SURVIVAL MATHEMATICS

APPLE II DISKETTE S■■■■■H■A

3 Apple II Diskettes, 48K.....$85.00

Taught with a practical, real-life approach, these programs have particular appeal for the older, basic student.

Real Cost - Will a special offer really save you money! Learn about sale price, special offers, and shopping comparatively.

Understanding Checkbooks - Statements - Learn how to manage your checking account and keep up with bank statements.

Fractions, Percents, and Decimals - Comparing common fractions, percents, and decimals using real life examples.

(Each title, 1 Apple II Diskette, 48K.....$29.95)

SURVIVAL SKILLS

APPLE II DISKETTE S■■■■■H■A

Complete Series (4 Sets).....$775.00

Designed to improve student's reading and thinking abilities. The use of "Real World" topics and a unique branching technique make these lessons especially suitable for the older, basic student. Each lesson is written on both a 5th grade and a 3rd grade reading level. Students first read a fifth grade level paragraph and are given a comprehension question. A correct student response is met with a graphic reward and advancement to the next frame. An incorrect response is met with a short explanation of why it is wrong. The same concepts are then presented in a paragraph written on a third grade level and the student is again questioned. The two reading levels utilized in these programs broaden their usefulness for basic skills instruction. By using branching and repetition when responses are incorrect, these programs enable students to arrive at an understanding of the content material and gain the important skills required for reading comprehension. Teacher's guide.

PERSONAL FINANCE

7 Apple II Diskettes, 48K.....$199.00

How to Finance a Car	Eating for Good Health
Money	You and Insurance
All About Interest	Credit
Metrics and You	

(Each title, 1 Apple II Diskette, 48K.....$29.95)

WORK

6 Apple II Diskettes, 48K.....$175.00

Part-Time Jobs	How to Get & Hold a Job
Job and You	New on the Job
Interviewing	Self-Concept & Your Work

(Each title, 1 Apple II Diskette, 48K.....$29.95)

CONTEMPORARY LIVING

6 Apple II Diskettes, 48K.....$175.00

Friends and You	Succeeding
Age of Responsibility	Decision Making
Map Reading	Law

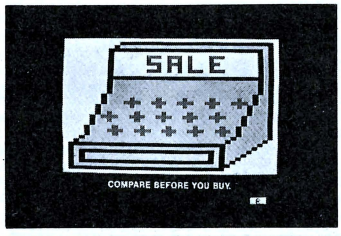
(Each title, 1 Apple II Diskette, 48K.....$29.95)

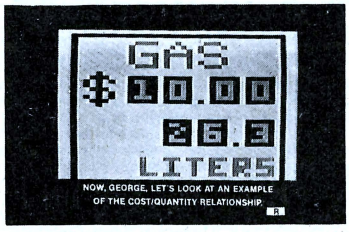
PERSONAL CONSUMERISM

8 Apple II Diskettes, 48K.....$235.00

Laws for Consumers	Tips on Buying a Used Car
Consumer Fraud	Reading an Advertisement
Consumer Help	Consumerism and You
Understanding Labels	
Shopping in a Comparative Way	

(Each title, 1 Apple II Diskette, 48K.....$29.95)





BASIC LIVING SKILLS

APPLE II DISKETTE ■■■■■H■A

Quality programs that offer a unique individualizing technique for students needing instruction in basic living skills. Each program provides interesting material written so that the learner can work independently. An advanced branching concept makes it possible for the material to be offered at the reading and comprehension level best suited to each learner's needs. The student's responses to questions determine the level at which the program will be presented. Students may progress at their own rate and receive positive reinforcement along the way. All programs contain supplemental materials and experiential suggestions for the teacher, goals and behavior objectives and error analysis on the results of assessment programs. Also includes information on hardware usage, program content, instructional content and evaluations.

COMPARATIVE BUYING

4 Apple II Diskettes, 48K.....$165.00

Branches to four reading levels, 7th, 5th, 3rd, 2nd (approximate grades). Contains enrichment level with simulation and problem solving. Explains the concepts of comparative buying. It provides the learner with interactive experiences in determining items to purchase based on number of variables. Contents: Buying Wisely; Becoming an Informed Shopper; Understanding Sales Buying; Cash Versus Credit Buying. Teacher's guide.

HOME SAFE HOME

4 Apple II Diskettes, 48K.....$165.00

Informative safety program highlights the major household hazards of fire, electrical shocks, falls and poisoning. Preventive suggestions are emphasized. Three reading levels, 5th, 3rd, 2nd (approximate grades). Instructional. Very extensive and creative use of color graphics in support of concepts. Links sounds and music to concepts. Appropriate for lower functioning students. Contents: Introduction and fire hazards; Electrical hazards; Fall hazards; Poison hazards. Teacher's guide.

INCOME MEETS EXPENSES

8 Apple II Diskettes, 48K.....$340.00

Recommended. **Booklist, Sept 1, 1982.** *"...maintains effective use of low-resolution graphics, colors, sound and flash techniques...intended for secondary school students and young adults whose cognitive ability levels are below normal."* **JEM Research.**

Introduces students to the concept of budgeting by learning about income and its relationship to fixed and variable expenses based on needs and want. Branches to three reading levels, 5th, 3rd, 2nd (approximate grades). Combines instruction with practice exercises. Has color graphics in support of concepts. Offers practical experience in basic budgeting concepts. Contents: Introduction and definition of budget, income and expenses; Definition of needs and wants and their relationship to expenses; Categorization of fixed and variable expenses in relationship to needs and wants. Individual worksheets and teacher's guide.

JOB READINESS - ASSESSMENT AND DEVELOPMENT

4 Apple II Diskettes, 48K.....$165.00

"...represents a good start toward filling the needs of a frequently-neglected segment of the population." **Creative Computing, Oct 1981.**

This innovative program combines the techniques of assessment and instruction in supplying the student with the information to develop job readiness attitudes. It also provides the practical knowledge necessary for filling out applications, interviews and locating job placement agencies. Combines attitude testing and instruction. Branching; Testing at two reading levels, 6th, 3rd (approximate grades). Tutorial at three grades, 6th, 4th, 3rd. Pre-test and Post-tests. Contents: Assessment of learner attitudes about work (pre-testing, tutorial, post-testing); Filling out job applications; Job interviews; Job placement resources. Includes worksheets and teacher's guide.

PROBLEM SOLVING IN EVERY DAY MATH

4 Apple II Diskettes, 48K.....$165.00

This process oriented program takes a step-by-step approach to analyzing practical everyday mathematical problems. It provides interactive experiences in determining the processes to be used in solving the problems. Branches to four reading levels, 7th, 5th, 3rd, 2nd (approximate grades) with enrichment level with simulation and problem solving. Contents: Problem Solving Process; Solving Addition and Multiplication Problems; Solving Subtraction and Division Problems; Solving Multiple Step Problems. Teacher's guide.

YOU CAN BANK ON IT

6 Apple II Diskettes, 48K.....$285.00

"...a good supplement to an existing commerce program." **JEM Research Supplement, 1982.**

Introduces the concept of a bank. Through interaction with presentations on the banking services of checking and savings, the learner is provided opportunties to apply the newly acquired knowledge. Branches to three reading levels, 5th, 3rd, 2nd (approximate grades). Combines instruction with practice exercises. Color graphics in support of concepts. Offers practical experience filling out banking forms. Contents: Concepts and rationale of a bank; Beginning a savings account; Depositing money into a savings account; withdrawing money fram a savings account; Beginning a checking account; Writing checks and keeping records. Includes worksheets and teacher's guide.

HOME ECONOMICS

ALCOHOL: AN EDUCATIONAL SIMULATION

See CAREER EDUCATION and GUIDANCE in this section.

BUDGETING SERIES

APPLE II DISKETTE ■■■■JH■A

BUDGETING TUTORIAL

1 Apple II Diskette, 48K.....$49.95

A tutorial budgeting program that will help your students understand what a budget is, why budgeting is important, what income and expenses are, how to set both long- and short-range goals, fixed and variable expenses, periodic and emergency expenses, and the importance of saving. This case study approach gives students practice in putting budgets together. Ideal for all levels of students - junior high through adult. Teacher's guide.

BUDGETING SIMULATION

1 Apple II Diskette, 48K.....$49.95

As the student works on an annual budget, real-life problems are presented for the student to solve. Teacher's guide.

CONSUMER EDUCATION

APPLE II DISKETTE ■■■■■H■A

Complete Series (7 Sets, 7 Diskettes).....$375.00

Complete consumer education program. Interactive, branched programming, Can be used for instruction in consumer economics, general business, business arithmetic and general mathematics. It is appropriate for use by adults who are unfamiliar with the topics presented. Students should be able to handle a sixth grade reading level and be able to do arithmetic involving decimals and percents. Diagnostic prescriptive pre- and post-tests accompany the complete program. Teacher's guide and student manual with full set or individual programs.

SAVINGS ACCOUNT

1 Apple II Diskette, 48K.....$60.00

Purpose of maintaining a savings account, elements of the savings passbook, deposit and withdrawal slips, interest and dividend payments defined, purpose of FDIC and FSLIC, simple and compound interest, opening an account.

CHECKING ACCOUNTS

1 Apple II Diskette, 48K.....$60.00

Purpose of maintaining a checking account, elements of opening an account, parts of a checkbook, parts of a check, endorsing a check, reconciling a bank statement with checkbook balance, others.

CREDIT CARDS

1 Apple II Diskette, 48K.....$60.00

Distinguishing between the use of cash and credit, parts of the credit card and credit slip, advantages of credit cards of various types, computing interest on unpaid balance, the liability and responsibility of being a credit card owner.

INSTALLMENT BUYING

1 Apple II Diskette, 48K.....$60.00

Defining installment purchasing, cash price vs. installment price, down payment, installment payment, carrying charge, advantages and disadvantages of buying on installment or with cash.

INVESTMENTS

1 Apple II Diskette, 48K.....$60.00

Purpose of stocks and bonds, kinds of stocks and bonds, differences between stocks and bonds, difference between dividends and interest, purpose of stock exchange and over-the-counter markets, reading newspaper market reports, mutual funds, purpose of SEC, others.

SALES COMMISSIONS

1 Apple II Diskette, 48K.....$60.00

Defining sales commission, quota, straight and gradulated commissions, computation of sales commission, straight commission, salary plus commission, graduated commission, etc., distinguishing between value of goods and quantity of goods.

AUTO INSURANCE

1 Apple II Diskette, 48K.....$60.00

Property damage -- liability, comprehensive, collision. Bodily injury -- liability, medical payments, uninsured motorists. No-fault insurance.

DAILY MENU ANALYZER

APPLE II DISKETTE ■■■■JH■■

4 Apple II Diskettes, 48K.....$145.00
4 Apple II Diskettes, 48K; Backups.....$170.00

RDA data on 700 foods to a monitor or printer and tailored to the age, sex, and nutrient requirements of the user. Analysis of your daily diet with suggestions on remedying deficiencies. Lessons on RDA's, labeling, calories, the eight essential nutrients, and the four food groups. Teacher's guide.

DESIGN ELEMENTS AND PRINCIPLES

APPLE II DISKETTE J H

5 Apple II Diskettes, 48K.....$150.00
5 Apple II Diskettes, 48K; Backups.....$180.00
Examine the color wheel and color plans, the illusions of line, and the tricks of texture. Unique approaches to the concepts of balance, proportion, emphasis, and rhythm. Includes a creative design exercise utilizing the computer. Teacher's guide.

EATING MACHINE

APPLE II DISKETTE J H

2 Apple II Diskettes, 48K.....$49.95
Simple but factual program designed for diet management and sound nutritional planning. Uses the computer to give vital information on actual intake of calories, vitamins and minerals and compares your diet to the recommendations of modern health authorities. Gives you nutritional scores for your complete day's food list and your average score for up to seven days. Shows you how to improve your score.

FAST FOOD

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
Students can now analyze those fast-food meals with the aid of a computer. As students order from a typical fast-food restaurant menu, the computer will print on the screen or on the printer a nutritional analysis of the meal -- showing the amount of calories, the fat, protein, vitamins and other nutritional content. A teaching guide for interpreting and studying the results is included.

FLOOR PLAN: COMPUTERIZED DESIGN

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
1 Apple II Diskette, 48K; Backup.....$47.00
An ideal interactive computer program to teach the basics of room arranging, furniture groupings, balance and harmony. You can construct room design "problems" for students to solve. Or students can work together and explore various solutions to the problems of how to arrange a room for both practical use and aesthetic pleasure. Teacher's guide.

FOOD FACTS: FIVE PROGRAMS

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K; Backup.....$45.00
Three high-interest information retrieval activites help students learn about their personal food habits and basic knowledge of nutrition. **Cereals** - uses color graphics to provide information on the refined sugar content of 64 different cereals. **Chemicals in Foods** - tests a student's ability to identify common foods through their ingredients. **Fast Foods** - student selects a menu from a fast-food restaurant and sees how long it takes to burn up those calories in various physical activities. **Food Graphs** - students may select from 64 common foods to find the percentage of RDAs in each of eight nutrients. **Vitamins** - tests students on their knowledge of fat- and water-soluble vitamins. Handouts for student record-keeping and activities. Teacher's guide.

FOOD POISONING, SANITATION AND PRESERVATION

APPLE II DISKETTE J H

4 Apple II Diskettes, 48K.....$120.00
4 Apple II Diskettes, 48K; Backups.....$145.00
Important basic information about food poisoning and sanitation. Help your students understand the importance of food care as humorous characters reinforce tutorials. Teacher's guide.

HEALTH AWARENESS GAMES

APPLE II DISKETTE J H C

1 Apple II Diskette, 48K; Backup.....$99.00
Five programs draw on extensive tables of statistics about people's health, living habits, and other behaviors, as these relate to life expectancy. Prepared to foster awareness of good health practices. Appropriate for junior high school through college to supplement courses in health, biology, nutrition, athletics, and physiology. Includes: **Coronary Risk** - calculates the individual's risk of cornonary heart disease and explains the risks. **Why Do You Smoke?** - determines each smoker's primary reasons for smoking, based on the smoker's answers to 18 multiple-choice quetions. Offers advice on dealing with smoking and its effects. **Exercise Weight** - on the basis of answers to a series of questions determines the most desirable weight for the individual. User is given a diet pattern that will best suit his or her needs. **Life Expectancy** - dramatically demonstrates the effect of a number of life conditions and personal characteristics on anyone's expected lifespan. **Lifestyle** - offers advice based on the effects of personal living habits on health and life expectancy. Teacher's guide.

HOME ACCOUNTANT

APPLE II DISKETTE H C A

1 Apple II Diskette, 48K.....$74.95
"...probably the most flexible and versatile personal financial budgeting and planning package on the market today..." **Book of Apple Software 1983.**
A complete home financial management program. Includes checkbook balancing, budgeting, printing of checks, a personal general ledger and a net worth statement. Custom retrieval allows you to search out and/or print out just the information that you need (i.e. all transactions that might have a tax consequence). Provides graphics for any category by bar graph, line graph, and/or trend analysis. Allows for approximately 1,000 transactions per disk. A good choice for the non-programming computer owner. User's guide.

HOME ECONOMICS CAREERS

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K; Career Guide.....$62.50
This program compares student's answers on an interest inventory against occupational specifics for 53 occupations. Students may then consult the Career Guide accompany the program for: personal and educational requirements, starting salary, outlook for the future, and places of employment for each job. Students are given specific suggestions on "Where to Start" to test their aptitude for the occupation. Teacher's guide.

HOME ENERGY SAVINGS

APPLE II DISKETTE H A

1 Apple II Diskette, 48K.....$45.00
Developed by the National Science Teachers Association. This game can be played by one or more students. Their task is to make sensible investments, within a given budget, that will help them to conserve energy in the home. In the process of spending their limited dollars, students learn about insulation methods, storm windows and doors, furnace replacement, lowering the thermostat, and other easy measures. The program lets students compete in a friendly fashion for energy savings and learn at the same time. Teacher's guide.

INTERIOR DESIGN SIMULATION

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$50.00
1 Apple II Diskette, 48K; Backup.....$60.00
Allows the user to easily design a room of any shape with maximum dimensions of 14 x 26 feet. Add windows, doors, and an optional fireplace to complete the design. Choose from 60 furniture shapes scaled to room dimensions and arrange them within your room. An optional printer routine is included. Includes a tutorial on the basic rules of furniture arrangement and complete support materials.

KNOW YOUR PATTERN

APPLE II DISKETTE J H

4 Apple II Diskettes, 48K.....$130.00
4 Apple II Diskettes, 48K; Backups.....$160.00
Instruction and practice in determining figure type of body build and pattern size, in reading and using the pattern envelope and guide sheet, and simulation practice exercises in proper pattern layout techniques. Teacher's guide.

MANAGING LIFESTYLES: SURVIVAL MATH SKILLS

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$55.00
Simulations designed to strengthen basic skills by involving students in using mathematics in daily life situations. **Diet** - Students plan a day's nutritious meals appropriate to their individual calorie requirements. The computer then rates the stuents' menu plans. **Comparison Shopping** - Small groups of students cooperate to buy a week's supply of groceries within the tastes and budget of a family of four. **Budget** - "What's it like after I graduate from high school?" Students look at some of the decisions they have to make about college, jobs, marriage, children, houses and cars. Includes teacher's guide with reproducible worksheets and masters for overhead transparencies.

MENU PLANNER

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$35.00
Will plan meals and prepare a shopping list. Allows you to store menus and change or delete menus. You may plan menus for up to 14 days (up to 3 meals per day).

MENU PLANNING SYSTEM

(Pizza Program)

APPLE II DISKETTE J H C A

1 Apple II Diskette, 48K.....$34.50
Computer generated menus with capability of adding or deleting foods, varying the frequency the foods are served (from daily to once every 99 weeks), preparing detailed shopping lists, automatically arranging the list in sequence according to the aisles of your favorite store, generating a per-serving calorie total, and preparing the menus for designated time spans (such as very week or every few days). Full documentation included. Requires printer.

MENUCALC

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$29.00
1 Apple II Diskette, 48K; Backup.....$37.00
A tool for Diet/Menu planning. Select food choices and instantly see how the choices affect your nutritional intake. For example, plan a 1500 calorie, low sodium diet. Enter foods and see a running total of calories and sodium. Add or delete foods at any point. Play "what if" with food choices to see how they fit your dietary plans. Or analyze your diet and learn how to make changes. Teacher's guide.

MICRO COOKBOOK

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K.....$40.00
"...rare pleasure to come across a program...that is both high-quality and inexpensive...an application program that will make you feel justified that you bought a computer. **InfoWorld, Vol. 5, No. 22.**
Plan menus, party meals, and even compile your own cookbook. Let computer know what foods you have on hand and what your food requirements are, and it will prepare a list of appropriate recipes that are automatically adjusted to the number of servings you wish to prepare. You can add, delete, modify recipes. Also provides nutritional and calorie guides. User's guide.

MONEY MANAGER

APPLE II DISKETTE H A

2 Apple II Diskettes, 48K.....$74.95
2 Apple II Diskettes, 48K; Workbook.....$79.90
Provides a sharp, individualized focus to help students bring together the concepts and skills of budgeting, banking services, credit, insurance, consumer purchases and taxes. Teacher's guide.

NUTRITION AND FOOD GROUPS

APPLE II DISKETTE J

1 Apple II Diskette, 48K; Backup.....$36.00
The aim of nutrition education is to establish good habits which will result in wise food selections. This module includes a "Lunch in the Computer Caferteria" food selection activity, a "Nutrition Bingo" game and a homework assignment. All of these activities are designed to teach about the nutrient content of food, to review food groups, and to demonstrate the importance of making good food choices. Teacher's guide.

NUTRITION AND THE FOUR BASIC FOOD GROUPS

APPLE II DISKETTE J H

5 Apple II Diskettes, 48K.....$135.00
5 Apple II Diskettes, 48K; Backups.....$165.00
An entertaining way to help students realize the importance of proper nutrition to a well-functioning body. Teacher's guide.

NUTRITION PURSUIT

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
1 Apple II Diskette, 48K; Backup.....$47.00
A computer game that teaches nutrition. One to four players race to the finish line by correctly answering questions in categories such as food facts, the grocery maze, fitness, snackology, and cooking. Teacher's guide.

NUTRITION SERIES

APPLE II DISKETTE H A

NUTRITION 1

1 Apple II Diskette, 48K; Backup.....$46.00
Helps students learn the importance of a balanced diet. Performs a quick, accurate nutritional analysis of foods consumed by an individual in a 24-hour period. In additon to a general briefing on nutrition and nutrients, the teacher's guide contains a food catalog of 598 items, a food diary, nutrition report, evaluation, and menu plan to guide students in the use of the program. Results can be viewed on the screen or printed. Teacher's guide.

NUTRITION 2

1 Apple II Diskette, 48K; Backup.....$45.00
Suitable for senior high, college, and adult community education. Builds understanding of food composition and the function of nutrients in body processes and activities. Students can calculate their caloric intake and see its relationship to the energy they expend over a one- or three-day time period. They can determine how a list of foods meets recommended amounts for calories and nutrients. Results can be viewed on the screen or printed. Teacher's guide.

PATTERN LAYOUT SIMULATOR

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$45.00
1 Apple II Diskette, 48K; Backup.....$55.00
This simulation includes three practice exercises in laying out pattern pieces to match cutting layout worksheets. A fourth exercise requires the student to position pattern pieces without the aid of a cutting layout. A printer option allows for a paper copy of the final layouts. Teacher's guide.

PLACE SETTING, MEAL SERVICE AND TABLE MANNERS

APPLE II DISKETTE J H

2 Apple II Diskettes, 48K.....$95.00
2 Apple II Diskettes, 48K; Backup.....$110.00
Color graphics illustrate proper place setting techniques, analyze meal service and the use of eating utensils. Interactive situations involving table manners and simulated place setting practice exercise are also included. Teacher's guide.

PLACE SETTING SIMULATOR

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$45.00
1 Apple II Diskette, 48K; Backup.....$55.00
This simulation provides practice in positioning each piece of the dinnerware and napkin within an individual place setting. A printer option produces a paper copy of the completed setting. Teacher's guide.

RECIPE FILE

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$35.00
Allows you to store recipes in 12 different cataegories and retrieve them at any time. Will also convert the recipe to feed a larger or smaller group. Recipes may be changed or deleted or additional recipes added at any time.

SALT SHAKER

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
1 Apple II Diskette, 48K; Backup.....47.00
Offers a tutorial on the problems of excess salt in the diet, gives a brief test, and provides a graph of your salt intake comparing it with the national average and recommended maximums. Teacher's guide.

TECHNIQUES OF SEWING SERIES

APPLE II DISKETTE J H

Complete Series (4 Sets, 8 Diskettes).....$300.00
Complete Series (4 Sets, 8 Diskettes); Backups.....$360.00
Color graphics, animated demonstrations, sound effects, interactive exercises, and simulations. Teaches the purpose of each technique, where and when it is used, and gives concise demonstrations of every step necessary to produce professional results. Each program includes objectives, suggested viewing sequence, documentation of the factual materials, worksheets, and unit test. Designed for the beginner of any age or an excellent review of proper techniques for the more experienced sewer. Teacher's guide

STAYSTITCHING
EDGESTITCHING
GATHERS
DARTS

(Each title, 2 Apple II Diskettes, 48K.....$95.00)
(Each title, 2 Apple II Diskettes, 48K; Backups..$110.00)

WEIGHTWATCH

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
1 Apple II Diskette, 48K; Backup.....$47.00
Gives useful information about fitness or fatness. Teaches the basics of how food, fat and activity relate to weight and fitness. Learn how many calories you burn in various activites; how many calories you need each day to maintain your present weight; your ideal weight range; and what percentage of your weight is fat. Devises a personal weight loss plan based on eating and exercising adjustments. Teacher's guide.

WHAT DID YOU EAT YESTERDAY

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$39.00
Students list the foods they consumed on a specific day and the computer analyses the diet for calories, vitamins, fat, protein, sodium and other nutrients. The analysis is printed on the computer screen or on a printer. Suggestions concerning excesses and deficiencies are offered. Based on USDA figures. Guide.

WHAT'S IN YOUR LUNCH

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$24.95
User selects from a menu of common lunch foods and computer produces a graphic display of the nutritional value of those foods. Allows for person's activity level in computations. Guide.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

VOCATIONAL/TECHNICAL

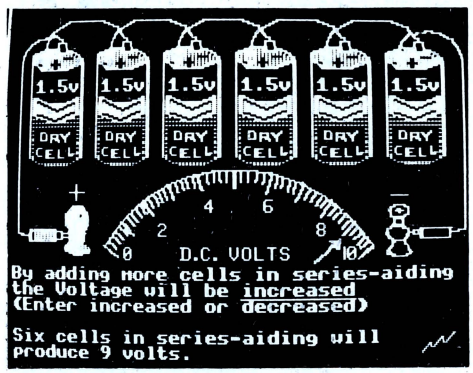
AUTOMOTIVE TECHNICIAN MATH SERIES

APPLE II DISKETTE J H A

Complete Series (2 Sets; 2 Diskettes).....$88.00
Using these individualized programs, students in an automotive technician program can learn to apply arithmetic skills to realistic problems such as those they will encounter later on the job. These programs teach the application of the four basic operations through detailed example problems, practice exercises, and a test. The problems and the numerical values used are randomly chosen. The test is taken at the computer and a printed copy can be made if desired, but the use of a printer is optional. Teachers can specify English or metric units for whole number problems. The teacher's guide includes descriptions of the problem content, suggestions for using the programs, and recording sheets for the students.

AUTOMOTIVE TECHNICIAN MATH 1
1 Apple II Diskette, 48K; Backup.....$44.00
Whole numbers and fractions.

AUTOMOTIVE TECHNICIAN MATH 2
1 Apple II Diskette, 48K; Backup.....$44.00
Decimals and percents.



BASIC ELECTRICITY AND ELECTRONICS: DIRECT CURRENT

APPLE II DISKETTE H A

6 Apple II Diskettes, 48K; Backup.....$399.00
Starting with the most fundamental concept, The Electron Theory, this tutorial program is designed for use by any first-year student. As each program builds on information shown in the previous diskettes, the student's understanding of these often confusing, yet extremely important concepts of Basic Electricity and Electronics steadily gows. With an average successful completion time of 25 minutes and approximately one complete interaction every 30 seconds, you're guaranteed an effective teaching tool. Features: Self-contained, tutorial program for individual use; Student management system stores quiz results for instructor's retrieval; Periodic review questions throughout program; Graphics and diagrams enhance understanding. Programs include: The Electron Theory; Circuits, Symbols and Diagrams; Meter Reading and Ohm's Law; Series Circuits; Parallel Circuits; Resistor and Complex Circuits. Teacher's guide.

BLUEPRINT READING

APPLE II DISKETTE H A

1 Apple II Diskette, 48K.....$55.00
Included in **Minnesota State Department High Quality Courseware List.**
Sequential beginning blueprint reading for carpentry, machine shop, drafting, industrial education, and welding trades. Includes vocabulary, orthographic projection, and isometrics. Program uses high resolution graphics. Students read units and must answer correctly before proceeding. Final test includes percentile score for correct responses. Teacher's guide.

CALCULATING BUILDING MATERIALS COSTS

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K.....$49.95
Helps students learn how to figure the costs of various building materials such as pipe, steel, plywood, molding and other such materials. Singles, pairs, linear feet, square feet, and board feet measurements are discussed. Allows teacher to store a list of up to ten types of plywood and lumber available in the school shop, including prices. Edit program included. Printed quiz; teacher's guide.

ESTIMATING MATERIALS IN MASONRY

APPLE II DISKETTE H

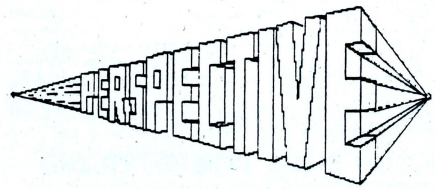
1 Apple II Diskette, 48K.....$29.95
Teaches your students about courses, allowing for doors and windows, and the mathematical processes involved in masonry. High resolution graphics. Guide.

HI-RES ELECTRONIC DESIGN

APPLE II DISKETTE J H C A

1 Apple II Diskette, 48K.....$49.95
Allows the user to create fast and neat electronic schematics and save them as picture files on disk as well as dump them to a printer. Diagrams may be labelled before saving. Incredibly easy graphics. Takes only a touch of a key to choose from 98 different electronic components, and a touch for choosing shape rotation. Components may be moved about the screen quickly and efficiently, via game paddles or joysticks.

HOME ACCOUNTANT: *See HOME ECONOMICS in this section.*



PERSPECTIVE DRAWING

APPLE II DISKETTE J H

1 Apple II Diskette, 48K; Backup.....$44.00
Introduces the study of one- and two-point perspective. Problems are illustrated and terminology is explained through computer graphics. Handouts in the teacher's guide assist students in completing the problems and reviewing and drawing what they see on the screen.

READING MICROMETERS AND CALIPERS

APPLE II DISKETTE H

Teach your student how to read micrometers and calipers. High-resolution graphics. Students will learn the components, function and practical applications through interesting and practical exercises.

READING OUTSIDE MICROMETERS
READING DEPTH MICROMETERS
READING INSIDE MICROMETERS
READING VERNIER CALIPERS

(Each title, 1 Apple II Diskette, 48K.....$39.95)

STATIONARY WOODWORKING EQUIPMENT SAFETY AND OPERATION

APPLE II DISKETTE J H A

2 Apple II Diskettes, 48K.....$139.95
Menu-driven. Program covers the parts, safety, and operations of the ten major stationary equipment used in the woodworking shop. Each equipment program includes the use of computer graphics to explain the parts, safety and operation of the machine. Includes a computer quiz for the parts lesson as well as one for the safety and operations lesson. Student management system included. Requires 2 disk drives. Printed quizzes; teacher's guide.

WELDING EQUIPMENT SAFETY AND OPERATIONS

APPLE II DISKETTE J H A

1 Apple II Diskette, 48K.....$79.95
Teacher-designed and student tested. Ideal for Occupational Versatility shops. Covers the parts, safety and operations of the major welding equipment used in a metals shop. Includes a computer quiz with test percentages displayed and stored permanently on disk for teacher review. Includes Oxyacetylene Welding, Oxyacetylene Heating and Cutting, Arc Welding, Spot Welding and Wire-feed Welding. Printed quiz masters; teacher's guide.

CAREER EDUCATION and GUIDANCE

ALCOHOL: AN EDUCATIONAL SIMULATION

APPLE II DISKETTE H A

1 Apple II Diskette, 48K.....$49.95

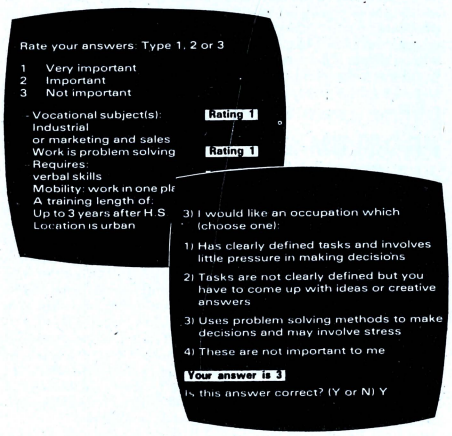
Teaches students about the dangers of alcohol in a safe and controlled environment. Data is entered by students providing unique feedback for each. In a party situation, various options are presented, including what to drink, when to leave the party, and how to arrive home. Regardless of whether the student chooses to drink alcohol, he will see the effect of drink on others. Computer will provide a graphic summary of each guest's blood alcohol level during the evening. A thorough tutorial is also included. Teacher's guide.

ALCOHOL AND HEALTH

APPLE II DISKETTE J H

2 Apple II Diskettes, 48K.....$120.00

Provides a brief history of the use of alcohol, societal views toward alcohol, and the physiological and behavioral effects of alcohol. Focuses on the facts about drinking and driving, alcoholism and laws concerning alcohol. Interactive tutorial instructions. Branched programming adjusts to wide variety of learners. High-resolution graphics. Includes: patterns of drinking in the United States; reasons for drinking alcohol; reasons for not drinking alcohol; how alcohol affects the body; behavior as affected by group drinking; effects of alcohol on brain cells; alcoholic beverages and automobile accidents; alcoholism; alcohol and the law; and others. Teacher's guide.



CAREER SCAN IV PROGRAM

APPLE II DISKETTE H C

2 Apple II Diskettes, 64K.....$169.00

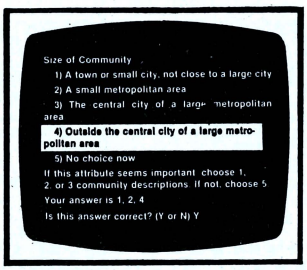
A comprehensive career search and exploration package accessing over 700 occupational titles. This program is based on the latest and most usable guidance classification system available -- the Standard Occupational Classification (SOC). The SOC provides a useful structure to group the 12,000 primary titles in the Dictionary of Occupational Titles. Totally self-instructional. Students do not need assistance even if they have never used a computer before. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each occupation which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option of change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. For one or two drive systems. Manuals and teacher's guide.

100 TOP COLLEGES

APPLE II DISKETTE H

1 Apple II Diskette, 32K; Book.....$34.90

This book and software package makes it easy to match one's talents, skill, and aspirations with the right school. Students enter into the computer the characteristics they're looking for from a college and the program automatically selects and displays a list of schools with the specified qualifications. Then students can turn to the 100 Top Colleges book for information on everything from SAT score ranges to housing and student activities -- and guidance on what steps will ensure the best chances for admission.



COLLEGE SCAN IV

APPLE II DISKETTE H C

2 Apple II Diskettes, 48K.....$195.00

Covers approximately 1100 colleges nationwide and uses 350 attributes to search them. Based upon the latest comprehensive sources of college and university information. Includes 270 majors or pre-professional programs and all major sports for men and women. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each college which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. Designed for one or two drive systems. Manual; Teacher's guide.

JOB SURVIVAL

APPLE II DISKETTE J H A

Complete Series (3 Sets; 3 Diskettes).....$119.95

Mature, relevant subject matter relates to student's real concerns. Includes 3 very vital programs. Written on two reading/conceptual levels (on level and below). Keeps everyone interested and involved. Colorful graphics hold attention while simulations keep more advanced learners moving ahead with increasing enthusiasm. Full instructional guides for each set, including teaching and evalaution strategies and worksheets.

FIRST DAY ON THE JOB

1 Apple II Diskette, 48K.....$44.95

"...very useful program...features flexible branching...written in simple language...helpful aid to vocabulary building." **Forecast for Home Economics.**

Covers important topics like clothing, grooming, the importance of arriving on time, and understanding instructions. Also what to do if you don't understand instructions. Exciting simulation allows students to select a job situation from either a factory, restaurant, or office and gives experience in making various decisions arising from simulated conditions.

PERSONAL HABITS FOR JOB SUCCESS

1 Apple II Diskette, 48K.....$44.95

Challenge students to make positive decisions through instruction designed to encourage good personal habits. Offers learners a simulation from which to make their decisions in four on-the-job situations. When analyzed by the computer, they get the benefit of immediate feedback showing how to turn their choices into positive decisions that prepare the way for real life success.

WORK HABITS FOR JOB SUCCESS

1 Apple II Diskette, 48K.....$44.95

Show students how to hold on to a job and develop habits leading to potential promotions. Contains both instruction and a high-interest simulation designed to demonstrate how their work habits impact on performance and ultimate success.

LIFE COPING SKILLS

APPLE II DISKETTE J H

19 Apple II Diskettes, 48K.....$295.00

Provides students with tools for self-improvement and life management skills. Contents: **Building Relationships** - designed to help people improve their relationships with others. Examines four categories of relationships: personal, societal, employment and family. participants are encouraged to take a close look at their own relationships. They study how to use communication skills to improve troubled relationships and when to ask for help. **Forming Positive Behavior** - Helps people recognize their own self-defeating behaviors and develop techniques for eliminating them. Emphasizes alternatives to self-defeating behavior. **Increasing Self-Esteem** - Addresses the questions: What is self concept and how does it affect a person's life? Encourages participants to examine how they feel about themselves and how those feelings have developed. Explores how their self concept affects their jobs and relationships. Simple techniques for coping with negative feelings of self worth. How to counteract negative feelings before they appear. **Communication Skills** - Focuses on communication skills as the keys to establishing rewarding relationships. Participants learn what communciation is and how to tell good communication from poor. They take a close look at their own skills and communication patterns and learn techniques for improving communication in both their jobs and personal lives. User manual.

MANAGING FOR SUCCESS

APPLE II DISKETTE H C A

Self-paced and continuously interactive, these programs utilize case studies and simulations of day-to-day situations for users to gain practice and experience in managing. Lively animation and color graphics motivate and hold interest and skills are practiced until they're mastered. Comprehensive reference materials with each set.

CAREER PLANNING

4 Apple II Diskettes, 48K.....$79.95

Designed for job holders as well as job hunters, this self-paced instruction begins with an exploration of the user's career experience and a step-by-step skill assessment. Through analysis of the user's current and ideal working environments (responsibilities, co-workers, location, salary) and personal needs, wants and expectations, a plan of action is developed to accomplish career change. Separate skill-development sections discuss writing resumes and cover letters and managing the art of the interview from both sides of the desk.

DELEGATION, TIME AND TASKS

4 Apple II Diskettes, 48K.....$79.95

Through self-paced exploration and assessment, users become better and more efficient managers of their own lives and careers. The use of time is analyzed and methods for improvement discussed after which users actually develop personal time management plans by setting priorities and developing task lists. The delegation of authority and responsibility is explored through critiques of simulations and case studies after which users design action plans for personal improvement. Added emphasis is placed on understanding the characteristics of successful meetings and how to improve and maintain the effectiveness of meeting dynamics.

PROBLEM SOLVING, STRESS AND CONFLICT

3 Apple II Diskettes, 48K.....$79.95

Understanding the roots of stress and conflict in career and personal situations provides the basis for the self-paced instruction and assessment offered in this multi-facted program. Users develop their own personal stress profiles and pinpoint stress factors in their lives as they learn to not only cope with stress but initiate steps to reduce it. Keys to identifying and analyzing problems are discussed, as well as preferred methods for dealing with such circumstances and discovering creative solutions. Particular attention is paid to conflict in management situations and developing action plans for conflict resolution.

SMOKING: IT'S UP TO YOU

APPLE II DISKETTE H

1 Apple II Diskette, 48K; Backup.....$45.00

Allows students to examine several topics related to smoking including health risks, cost considerations, immediate effects and personal attitudes. Provides a pretest for assessing each student's present knowledge about the effects of smoking; allows students to explore their own attitudes relating to smoking; presents information about health, costs, pregnancy, and nonsmokers' rights as it applies to smoking; examines the tar, nicotine, and carbon monoxide found in cigarette smoke from a list of nearly two hundred brands; and explores the physiological effects of smoking a single cigarette. Teacher's guide.

LOGIC, PROBLEM SOLVING and LEARNING GAMES

ADVENTURE MASTER

APPLE II DISKETTE I J H

2 Apple II Diskettes, 48K.....$44.95

A unique tool that becomes a literal "adventure factory" when fueled by imagination. Users are helped to design their own text-adventure games, creating up to as many as 60 locations within each adventure. Easy to use, it allows budding game developers to describe places, plan events, create secret exits, hide objects and build entire worlds into which other adventurers may travel in quest of a prize or to save a galaxy. Opens up the world of game design and encourages the use of mapping, problem-solving and strategy skills. Comes with adventures written by Christopher Chance and Jean Craighead George. User's guide.

CREATIVE PLAY

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Book.....$47.95

"An outstanding value." **Learning Magazine.** *Learning Computer Software Award.*

Number games and word games, mapping and maze activities, coordinate geometry, symmetry puzzles. Uses strategy games to develop critical thinking skills. Provides a lively introduction to the exciting world of computers. 25 interactive programs and an excellent teacher's guide.

DOUBLE 'N' TROUBLE

APPLE II DISKETTE I

2 Apple II Diskettes, 48K.....$39.95

Grade 3-6. An educational trivia game which keeps students interested for hours. Topics: Social Studies; Science; Geography; and Children's Literature. Questions have been written by elementary teachers to include a variety of content that children should know. Teacher's guide.

EARLY LEARNING

APPLE II DISKETTE

EARLY GAMES

1 Apple II Diskette, 48K.....$34.95

"...a fun learning tool for preschool children..." **Personal Computer Age, July 1983.**

Learning games for young children or early primary students. Very little adult assistance needed, picture menu, bright colors, large numbers and letters. Nine separate games include: Match Numbers, Match Letters, Count Blocks, Add Stacks of Blocks, Subtract Blocks, Working With Alphabet, Comparing Shapes, Drawing and Saving Colorful Pictures, Practice Spelling Names.

JUGGLES' RAINBOW®

1 Apple II Diskette, 48K.....$29.95

Learning Computer Software Awards 1982.

For young children who want to use a computer before they can read. They press the keys to make pictures appear. Children also work with lines and circles. Picture clues let children work alone or with friends. User's guide.

Juggles' Rainbow is a trademark of The Learning Company.

KINDER COMP

1 Apple II Diskette, 48K.....$24.95

"...attractive and fun to use...captivated my entire family...original and exciting." **Compute! May 1983.**

Ages 3-8. Three games: **Draw** - lets the child use the joystick to create colorful art on the screen. **Scribble** - sends an enlarged character into motion with sound, all at the touch of a key. **Letters** - helps child match a series of lower and upper case characters to those on-screen.

KOALA MUPPET LEARNING KEYS (Kid's Computer Keyboard)

1 Apple II Diskette, 64K; Keyboard.....$79.95

Simple, easy-to-use keyboard designed especially for young children. Includes software which provides letter, number and color learning activities as well as creative fun. Features the Muppet® characters - Kermit, Miss Piggy and friends. Large easy-to-read keys arranged in A-Z and 0-9 sequence for easy location. Includes "Go", "Stop", "Oops" and "Help" keys. Makes computer learning activities fun and challenging for those children too young to deal with the complexities of the conventional keyboard. Teacher's guide.

MICRO FOR MICROS SERIES

Complete Series (4 Sets, 4 Diskettes).....$134.95

Provides a lively introduction to computer use, while also developing basic learning skills in math, music, estimating, and reading. Each title contains one Apple II Diskette, 48K.

Micros for Micros: Numbers.....$34.95

Practice sorting, ordering, logic, and counting skills in a variety of entertaining ways. Pop balloons and uncover secret numbers on the computer, learn to recognize numerals with your eyes closed.

Micros for Micros: Music.....$34.95

Explore the patterns of music, as well as mathematics and science. Create songs on the computer or try your hand at putting together note sandwiches.

Micros for Micros: Estimation.....$34.95

Learn to make quick approximations of distance, speed, quantity, and length. Locate the train in the computer's tunnel, or guess how many trucks fit in the toy chest. You'll even find bugs in the computer -- but don't worry, they're supposed to be there!

Micros for Micros: Words.....$34.95

Learning to recognize the curves and lines that adults call "letters". This recognition is the goal as you guess the computer's hidden words, and create sentences and watch the computer animate.

RHYMES AND RIDDLES

1 Apple II Diskette, 48K.....$24.95

"Graphics and sound are delightful, motivating and rewarding." **Microsift Reviews, June 1983.**

Helps children learn reading and spelling by associating specific letters to words they already know. Children also learn the location of letters on the keyboard and the correct lyrics to nursery rhymes and famous sayings. Ages 5-9.

SHAPE AND COLOR RODEO

1 Apple II Diskette, 48K.....$29.95

Six entertaining learning games with a rodeo theme help children recognize and match shapes and colors. Includes: Shape Roundup, Cowhand Brand Color Mix and Match I and II, Rope Trick, and Rodeo Flags. User's guide.

GAME SHOW MASTER

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K.....$39.95

"This program uses excellent graphics, is well designed for the purpose intended, and is extemely easy to use...easily modified, so it will fit a variety of needs." **Curriculum Reviews, Dec 1982.**

An educational tool for vocabulary development. This entertaining computer game uses animated color graphics with the appearance of a TV game show. Entertains while educating children about varied subjects -- biology to famous cities to nursery rhymes to advanced vocabulary and more. It includes an easy to use authoring system so you can add your own subjects. Lessons in 15 subjects areas are included with the package. Teacher's notes.

GERTRUDE'S PUZZLES®

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$44.95

Learning Software Computer Awards 1982.

Ages 6-up. Games that help children develop reasoning skills.Children learn how to solve problems with incomplete information and analyze what they see. Players learn by moving puzzle pieces to form color and shape patterns. They move to six different puzzle rooms, each with a new challenge. Children can design their own set of pieces. The harder puzzles manage to challenge adults. User's guide.

Gertrude's Puzzles is a trademark of The Learning Company.

GERTRUDE'S SECRETS®

APPLE II DISKETTE E P

1 Apple II Diskette, 48K.....$44.95

"...is a gem...presents young learners with a kind of logical relationships wading pool." **Computing Teacher, May 1983.** *Recommended.* **Booklist, Jan 1983.**

Ages 4-9 A series of games that help children learn logical thinking while they play with colors and shapes. Children learn to create order and to plan ahead. Players solve puzzles by arranging game pieces according to given rules or by guessing a secret rule. They can play with sets of shapes that come with each game or they can create their own special shapes. Teacher's guide.

Gertrude's Secrets is a trademark of The Learning Co.

IN SEARCH OF THE MOST AMAZING THING

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$32.95

"...highly recommend this game for the educational opportunities it provides as well as the exciting yet non-violent adventures." **Byte, Dec 1983.**

A computer game that is instructive, not destructive. Just as importantly, however, it is fun. Written by Tom Snyder, educator and author of the best-selling Snooper Troops® Detective Series. Designed to let your kids negotiate with aliens instead of destroying them, because, given the opportunity, kids enjoy using their minds. User's guide.

MEMORY CASTLE

APPLE II DISKETTE I J H

1 Apple II Diskette, 48K; Backup.....$55.00

Recommended for purchase by **Family Computing** and **Cricket.** *Learning Software Award.*

Exciting colorful adventure game that helps your students remember instructions and follow directions. Inside the Memory Castel, students are given a list of instructions. As they move from place to place in the castle, the risks are high. One false move and they are banished. To help them play the game successfully, your students are introduced to a special code designed to improve their memory. Once they have mastered this code, they will be amazed at the power of their minds...and so will you! Backup; teacher's guide.

MIND STRETCHER

APPLE II DISKETTE I J

5 Apple II Diskettes, 48K.....$125.00

"...teaches analytical thought and planning as few other programs do." **Midnite Software Gazette, Nov/Dec 1981.**

Specifically designed for gifted and talented students. These students do not just play games, they look for winning strategies, they analyze patterns, they develop charts of the previous moves made, they are challenged to use analytical problem solving techniques to solve these interesting, entertaining and educational puzzles. Includes: Jigsaw, Traffic Jam/Chain Reaction, Rubik/Candles, Black/Kayles, Jinx/Welter. Teacher's guide.

MOPTOWN PARADE®

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$39.95

Learning Computer Software Award, Jan 1984.

A progression of seven playful games designed about colorful Moppet characters that teach logic, strategy development and pattern recognition. User's guide.

Moptown Parade is a trademark of The Learning Company.

MOPTOWN HOTEL®

APPLE II DISKETTE P I

1 Apple II Diskette, 48K.....$39.95

Learning Computer Software Award, Jan 1984.

In seven increasingly challenging games children test hypotheses, use analogies and develop strategic thinking skills. A sequel to Moptown Parade. User's guide.

Moptown Hotel is a trademark of The Learning Company.

MIND PUZZLES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup; Guide.....$44.00
Home Version: 1 Apple II Diskette, 48K; Guide.....$29.95

Honorable Mention, **Council for Exceptional Children, 1983 National Software Contest.**

Attract your students to the fun world of problem solving using these two sets of programs. In **Mazes of Rodentia**, students apply a variety of logical thinking skills while participating in a maze tournament. Students can control the difficulty level by selecting the size of the maze in which they want to travel and the type of aid they want to take along. **Queen Bee of Menta** gives students practice associating a set of symbols and characteristics and discovering the order in which they must be arranged to duplicate a given pattern. Includes tasks of varying difficulty. Can be used with a wide range of students.

MYSTERY MASTER: MURDER BY THE DOZEN

APPLE II DISKETTE J H

1 Apple II Diskette, 48K.....$34.95

"...a fair index of things to come, let's have more, more and yet more of the same – and as quickly as possible, too!" **Electronic Games, July 1984.**

Sharpen deductive reasoning skills. Twelve crimes can be investigated by up to four players in a race to unmask the perpetrator. Would-be detectives are given a map of the city and details of the crime. Then they are given options -- where to go, whom to interview, what areas to search, etc. Cooperatively, competitively, or alone, players have to identify the guilty party and determine the motives. Teacher's guide.

PROBLEM-SOLVING STRATEGIES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup; Guide.....$48.00
Home Version: 1 Apple II Diskette, 48K; Guide.....$29.95

Two powerful, interactive tutorials, **Diagonals** and **Squares**, teach students the strategies of Trial and Error, Exhaustive Listing, and Simplifying the Problem. Students collect data, create charts, find patterns, and make generalizations as they apply these strategies to the graphically presented puzzle problems. Two other innovative programs challenge students to apply the strategies to more complex, open-ended problems. In **Thinking With Ink**, students compete for the lowest possible cost by coloring a pattern of rectangles. In **Pooling Around**, students discover rules to predict the behavior of a ball by analyzing data they collect from a simulation of a simplified pool table. A color television is needed for **Thinking With Ink.** Teacher's guide.

SCIENCE FICTION INTERACTIVE ADVENTURES

APPLE II DISKETTE H

Interactive software based on plots and characters created by great authors. Puts the student right in the center of the adventure story. The story unfolds as the student makes choices and decisions that control the outcome. The settings are based on the science-fiction classics but the action is determined by the student. Every adventure features an advanced text parser system that understands hundreds of words, full color graphics and a beautifully illustrated package that includes background, a word list, and a hint book.

AMAZON
DRAGONWORLD
FAHRENHEIT 451 INTERACTIVE ADVENTURE
RENDEZVOUS WITH RAMA
SHADOWKEEP

(Each title, 1 Apple II Diskette, 48K; Book.....$39.95)

STORY CLASSICS: INTERACTIVE ADVENTURES

APPLE II DISKETTE I J

Some of the greatest classics of all time now available as a unique line of adventure games. Highly interactive. Each game places your students right in the role of hero or heroine. So instead of just reading what happens, students will find out through first-hand experience as they make decisions, explore their territory and resources and create adventures of their own. User's guide with each set.

SWISS FAMILY ROBINSON
BELOW THE ROOT

(Each title, 1 Apple II Diskette, 48K.....$26.95)

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STRATEGIES IN PROBLEM SOLVING SERIES

APPLE II DISKETTE S E P I J H C A

CODE QUEST: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Students sharpen their thinking skills as they try to break a series of secret codes that reveal clues to the identities of mystery objects. Students or teachers can also enter their own mystery objects and clues. Develops the skills of discrimination, classification, and pattern identification. Provides practice in solving problems of varying complexity. Backup; Teacher's guide.

COLOR KEYS: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Improves students' command of analysis, synthesis and problem solving strategies. Forty-three levels of difficulty. First a key appears, showing that two colors can be substituted for a third color. Students use the key as the basis for "coloring in" answers to problems. At the beginner's level, they simply read the key and transfer information. At advanced levels, the problems become more challenging as students have to make more than one substitution to arrive at the correct answer. Includes automatic record-keeping. Backup; teacher's guide.

FACTORY: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Learning Computer Software Award, Jan 1984. Noted as Exemplary Math/Science Courseware. **Classroom Computer News.** *Award Winner,* **Council for Exceptional Children Software Search – Gifted Category.**
Color graphics and animation. Challenges students to create geometric "products" on a simulated machine assembly line that they design. Focuses on problem-solving strategies, including working backwards, analyzing a process, determining sequence and applying creativity. Includes: **Test Machine** - Students test the effect of three electronically simulated machines on a raw material. **Build a Factory** - Students set up an assembly line and watch it produce a product. **Make a Product** - Using their knowledge from the first two programs, students now enjoy the challenge of building a factory to duplicate a product shown on the screen. Backup; teacher's guide.

FUN HOUSE MAZE: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Gives students practice in developing and testing problem solving strategies. The aim of the game is to discover the most direct route to three mysterious doors leading out of the maze. Along the way students encounter an array of rambling passages, false starts, dead ends, closed circuits and blind turns. Provides practice in pattern recognition and identifying multiple solutions. Builds skills in the problem solving strategies. Backup; teacher's guide.

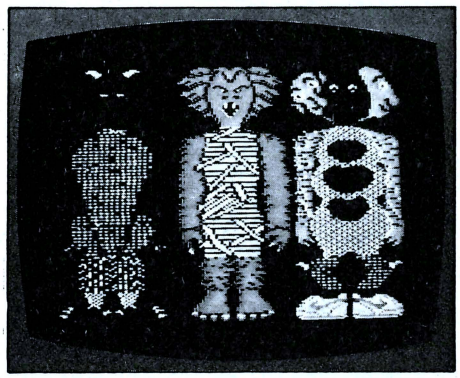
GEARS: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Allows students to experiment with gears while learning the problem solving skills of prediction and analysis. Students start by selecting the number of gears they wish to line up, and the number of teeth for each gear. Then, given the number of rotations the first gear will turn, they must predict the direction and number of times the last gear will rotate. Animated graphics make the program come alive on the screen. Backup; teacher's guide.

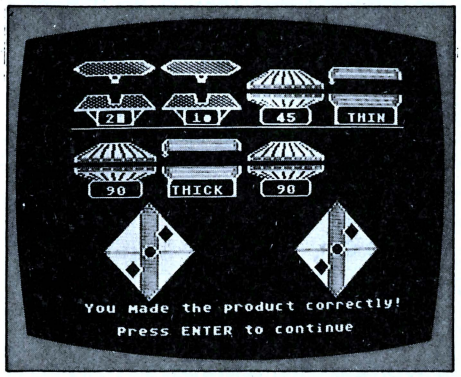
INCREDIBLE LAB: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Award Winner, **Council for Exceptional Children Software Search – Gifted Category** and the **Consumer Electronic Show Merit Award.**
Imagine a beaker filled with a bubbling solution and a list of "crazy chemicals" to add to the mixture. The students choose and mix the chemicals, the bunson burners heat up, and from the vapor a monster emerges. Each chemical produces a specific feature of a monster. The student discovers through trial and error, each chemical's effect. Students try to predict the monster that will emerge from their mixture. High resolution graphics, vivid color and animation. Backup; teacher's guide.

POND: STRATEGIES IN PROBLEM SOLVING
1 Apple II Diskette, 48K; Backup.....$55.00
Award Winner, **Council for Exceptional Children Software Search – Gifted Category** and *Learning Software Award.*
A small green frog lost in a pond of lily pads, helps students recognize and articulate patterns, generalize from raw data and think logically. The student chooses from six ponds, or levels of difficulty, in which lily pads are displayed in increasingly complex patterns. Student's task is to determine the patterns that will get a frog across the pond. Students collect points by directing their frogs through as many ponds as possible with the fewest number of moves. Emphasis is on efficiency of pattern. Backup; teacher's guide.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult





WIZARD OF WORDS

APPLE II DISKETTE I J

1 Apple II Diskette, 48K.....$39.95
Makes learning language skills an entrancing experience. Knights, heralds, jugglers, a princess and a fire-breathing dragon help as the Wizard's wand makes 5 different word games appear. The Wizard creates his magic with a powerful dictionary of over 20,000 words keyed to age levels. You can tailor each game to develop your child's reading, spelling and vocabulary skills. Or you can add words and lessons to any game. Activities: Knights help you complete words letter by letter. A playful dragon breathes fire to release all the words you find imprisoned in one large word. Help the juggler unjumble words. Weave a magic crossword pattern. Try to find the mystery word. Teacher's guide.

WORD QUEST: BINARY SEARCH STRATEGIES

APPLE II DISKETTE I J

1 Apple II Diskette, 48K; Backup.....$55.00
Two games which deal with binary search strategies, increasing vocabulary, and alphabetical order. In the first game, students deal with the concept of "betweenness" as they try to find a word that fits between 2 given words. The second game is the competition mode, in which one student picks a "mystery" word, and the other has the challenge of trying to guess what the word is by getting clues as to which words the mystery word fits between. Backup; teacher's guide.

ZORK TRILOGY

APPLE II DISKETTE J H

Complete Series (3 Sets, 3 Diskettes).....$129.85
The classic underground odyssey, takes you into the extraordinary environs of the Great Underground Empire. It's a world so vast and unique, it can offer new discoveries no matter how often you explore it, with challenges that change and revitalize the adventure each time you make your descent. The **New York Time Book Review** sums up the ZORK trilogy as *"remarkable adventure fantasies".* ZORK adventures are among the best-selling computer games in history. ZORK I, II, and III all share a common thread, yet each is a complete and separate story unto itself -- so you can play them in any sequence you choose. Documentation.

ZORK I (The Great Underground Empire)
1 Apple II Diskette, 48K.....$39.95

ZORK II (The Wizrd of Frobozz)
1 Apple II Diskette, 48K.....$44.95

ZORK III (The Dungeon Master)
1 Apple II Diskette, 48K.....$44.95

COMPUTER LITERACY

In this section we have omitted most of the grade level designations because the level is largely dependent upon the previous experience of the computer user. Some adults and teachers can be beginners while some junior high students are quite sophisticated in the use of computer languages and programming (and vice versa). Programs which are designed specifically for younger children are noted in the description. Most programs may be used by junior high level and up. Please read the description carefully to help determine which programs will fit your needs.

APPLESOFT SERIES

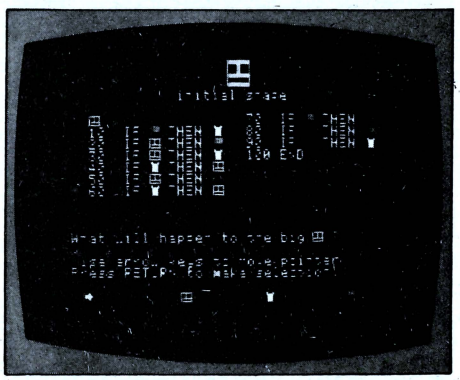
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$49.00

APPLESOFT BASIC: BEGINNING
1 Apple II Diskette, 48K; Backup.....$49.00
This diskette and training manual introduce educators and other adults to the fundamental concepts of programming in the Applesoft BASIC lanugage. Trainer notes and participant handouts are designed to develop the major concepts of BASIC programming, including output (print and graphics), input, repeating (FOR/NEXT), branching (IF/THEN and GOTO), accumulators, counters, and flags. Extensive hands-on programming experience is proved. The manual provides materials for 12 hours of class sessions. Content is primarily directed toward the training of adults, but is also appropriate for high school students.

APPLESOFT BASIC: ADVANCED
1 Apple II Diskette, 48K; Backup.....$49.00
Teacher training materials. Topics include Boolean arithmetic, PEEKS, POKES, CALLS, functions, use of game controls, error processing, subscripted variables, sorting techniques, and files. Manual is formatted for a course composed of five 3-hour sessions. Includes outline, notes, discussion problems with example programs, and student handouts and assignments.

APPLESOFT SPECIAL FEATURES
1 Apple II Diskette, 48K; Backup.....$48.00
Teacher training materials emphasizing Apple graphics, including high- and low-resolution graphics and the creation and manipulation of shape tables. Manual is formatted for a course with five 3-hour sessions.

BANK STREET WRITER: *See TEACHER/ADMINISTRATOR PROGRAMS*



BLAZING THE BASIC TRAIL IF-THEN STRATEGIES

APPLE II DISKETTE
1 Apple II Diskette, 48K; Backup.....$55.00
Helps develop logical thinking while developing key programming concepts. You receive randomly generated programming statements...such as IF THEN...to insert into a program at the position of your choice. You try to arrange the statements such that the initial block is transformed into your specified color. Designed to help develop logical thinking skills needed for programming, improve key programming concepts, and teach the structural elements of programming. Backup; teacher's guide.

BASICS OF BASIC

APPLE II DISKETTE

2 Apple II Diskettes, 48K; Backups.....$79.00

A highly interactive program for teaching BASIC programming. Students are guided through specific examples in a step-by-step manner and materials are presented in small, easy to follow segments. Can be geared for slower to advanced learners by optional reading speed control. These programs are menu-driven and user-friendly and make extensive use of high resolution color graphics and sound. They are accompanied by a well-planned workbook designed to reinforce the concepts by providing examples, exercises and activities so that students actually begin to write programs. Good material for anyone wishing to learn BASIC.

COMPUTER PROGRAMMING GRADES 6-9

APPLE II DISKETTE

EXPERIENCING PROCEDURES

1 Apple II Diskette, 48K; Backup.....$36.00

Designed to be a student's first introduction to computer programming. Learning to organize a program into a set of procedures not only introduces good program design but also good problem-solving skills. With **Fly**, a simple graphics-oriented language, students can write procedures to create geometric objects on the screen. This introduction to procedures can then be transferred to the learning of other computer languages.

IFS AND THENS OF PROGRAMMING

1 Apple II Diskette, 48K; Backup.....$36.00

Concept of branching, an important feature in computer programs as well as in logic, is introduced in this program. The lessons introduce the IF/THEN statement as a form of conditional branching based on logical decision. The GOTO statement is also explored as a form of unconditional branching. Examples of programs with IF/THEN and GOTO are given to the students together with acitivites in which the students write programs using these statements. Includes handouts, transparencies, and a quiz.

LOOPS

1 Apple II Diskette, 48K; Backup.....$36.00

Introduces the concept of repeating a process, or "looping". The FOR/NEXT statement is presented as a convenient means of controlling a fixed number of repetitions. The function of the FOR/NEXT command in a computer program is explored using the GLASS COMPUTER. Students examine programs using the FOR/NEXT statement as well as write their own programs. A second lesson introduces the READ/DATA statement as a convenient way to handle a large amount of information. Examples of programs using READ/DATA are given to the students along with an activity in which the students write programs using READ/DATA. Includes quiz. Teacher's guide.

THREE R'S OF MICROCOMPUTING

1 Apple II Diskette, 48K; Backup.....$36.00

The most basic functions of a computer are the input, output, and processing of information. These computer functions correspond to the traditional three R's -- reading, writing and arithmetic. With this program, teachers can begin teaching the BASIC language. Reading, or "input", is taught using the INPUT statement; writing, or "output", is presented using the PRINT statement; and simple arithmetic functions, or "processing", are illustrated using the LET statement. The lessons build on the ideas of procedure-oriented programming developed in the Experiencing Procedures program. A special feature of this package is a program called the GLASS COMPUTER. This program is designed to demonstrate graphically how computers internally work. The program interprets each BASIC statement one at a time and then simulates what the computer does with each. Thus, the GLASS COMPUTER gives the students a concrete picture to help them understand the abstract processing of computers. Teacher's guide.

COMPUTER LITERACY: INTRODUCTION

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$49.95

Designed to give students a basic understanding of computers and how they are used in business, industry and society. Provides a foundation in the basic concepts and uses of computers that prepares students to use computers effectively in study and work, to understand how computers affect their lives directly and indirectly, and how to be effective consumers of computer products and services in the future. Teacher's guide.

COMPUTER SCIENCE DEMONSTRATIONS I

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$29.95

Graphically demonstrates three shuffling techniques and one hashing technique. Student may select to follow the demonstrations in lesson format or have the program demonstrate the technique through to completion. A full BASIC listing of the particular technique is provided to prepare for the Computer Science Achievement test. Teacher's guide.

COMPUTER SORTING TECHNIQUES SERIES

APPLE II DISKETTE

"...does a good job teaching a difficult concept." **Minn. State Dept. of Education High Quality Courseware List.**

COMPUTER SORTING TECHNIQUES 1

1 Apple II Diskette, 48K; Backup.....$29.95

Excellent resource for the Computer Science or Computer Math teacher in conjunction with a course in programming or Advanced Placement Computer Science. May be used for class demonstration by the teacher or individually by a student. Choice of five different sorting routines: Bubble Sort, Shell Sort, Insertion Sort, Selection Sort, and Quick Sort. Teacher's guide.

COMPUTER SORTING TECHNIQUES 2

1 Apple II Diskette, 48K; Backup.....$29.95

Similar to Sorting Techniques 1. Demonstrates three sorting techniques and one searching technique (used in many sorting routines); Heap Sort, Link Sort, Shaker Sort, and Binary Search. Explanation of each routine is graphically demonstrated on the screen. Teacher or student controls each step of the algorithm being shown. Teacher's guide.

CREATIVE WRITER/FILER/CALC: *See TEACHER/ADMINISTRATOR section.*

CYBERLOGO TURTLE

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$79.95

Seven programs which help the student discover and use various facets of LOGO. A student can "sketch" using turtle graphics and save programs and screen pictures on the disk. An on-line "help" mode provides quick solutions to students' most frequent problems.

DELTA DRAWING

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95

"...fun, dynamic, visually exciting, and encourages experimentation..." **Computing Teacher, May 1983.**

Ages 4-12. Children have fun drawing and coloring while learning about computer programming. Child first creates picture using single-key commands. Computer records it as a program and child can see the program that was written. Then child can write program in text mode and switch to graphics mode to see their picture. This helps children learn the kind of procedural thinking needed for programming. Easier to use then LOGO turtle graphics. For more advanced users, a complete instructional manual is enclosed.

ELECTRONIC SPREADSHEET

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$49.00

Teach your business education students to use the VisiCalc® spreadsheet. With this new revised version of The Electonic Spreadsheet, students will learn how to do anything they would normally do on the traditional accountant's worksheet -- without the use of an eraser! A change in any part of the spreadsheet causes the automatic correction of all other cells on the spreadsheet which the change affects. Provides a tutorial which introduces students to the VisiCalc® commands and provides practice exercises. (VisiCalc® must be purchased separately -- see Teacher/Administration Programs in this catalog.) Teacher's guide.

EXPLORING LOGO: APPLE

APPLE II DISKETTE

1 Apple II Diskette, 64K; Activity Cards.....$49.00

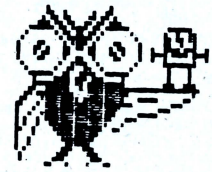
Activity cards that teach a concept, present a challenge and offer help. Students learn how to create graphics; work with words, lists and sentences; use sound and music; do computations and design group activities. Accompanying diskette gives sample programs. NOTE: for 64K with Terrapin or Krell LOGO. See LOGO by Terrapin this section.

FILES ON THE APPLE

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup; Student Manual; Answer keys.....$50.00

This learning program consists of a student text, an answer key, and a diskette. The topics covered include the use of Apple II sequential files, random access files, and binary files. The student text consists of five chapters, including example programs, exercise sets, chapter reviews and chapter quizzes. Answers to the exercise sets and chapter quizzes are provided in the separate answer key. All example programs, including those in the answer key, are included in the diskette.



FRIENDLY COMPUTER

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup; Guide.....$48.00
Home Version: 1 Apple II Diskette, 48K; Guide.....$29.95

Five programs that introduce young students to the Apple II computer. **Keyboard** introduces students to the locations of the keys on the Apple II+ and IIe keyboards. **Zebug** uses a game format to provide students with practice in locating keys. **Term Worm** graphically displays the major components of a computer system. **Picture** allows students to create drawings using single keystroke commands. The pictures may be saved on the diskette and later shown by the **Picture Show program.** Teacher's guide contains student handouts that complement the various programs.

HANDS ON BASIC PROGRAMMING

APPLE II DISKETTE

1 Apple II Diskette, 48K; Book.....$79.00

"...this clearly written and easy-to-understand package can benefit any inexperienced computer user aged 13 and up..." **InfoWorld, Feb 20, 1984.**

The ideal way for you to learn programming. It teams a comprehensive workbook with the unique instructional features of the *Hands On* software and your computer's interactive capabilities. Immediately you are learning to design, code, and debug your own programs. 200-page workbook steps you through programming techniques. The software lets you examine your programs, locate errors, and diagnose problems on your screen. You learn to program through discovering how your computer thinks. A unique system which encourages you to experiment with your new skills, backing you up with the tools to learn from your experience.

HOMEWORD: *See TEACHER/ADMINISTRATOR PROGRAMS*

HOW TO PROGRAM IN APPLESOFT BASIC

APPLE II DISKETTE

1 Apple II Diskettes, 48K.....$29.95

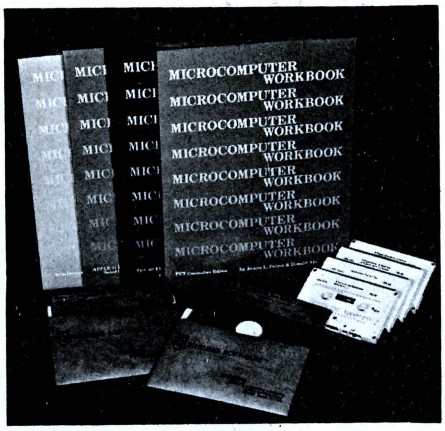
Use your Apple computer to learn how to program. This twelve-lesson interactive tutorial will teach you everything from basic programming fundamentals up to advanced high resolution graphics. Move at your own pace -- take two nights or two months. Even if you've never written a program before, you'll be at home in Applesoft BASIC before you know it. User's guide.

KIDS ON KEYS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$24.95

Familiarizes children with the computer keyboard as they learn to identify numbers, letters, and words, and associate them with the images they see on the screen. Ages 3-9. Three exciting games and four levels of difficulty. Sound effects. Teacher's guide.



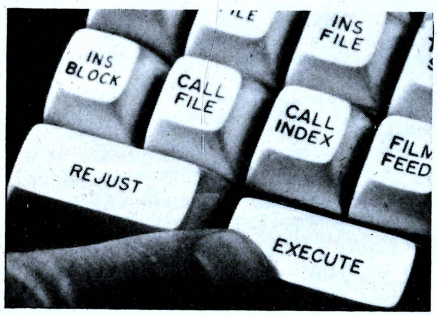
HOW TO PROGRAM IN BASIC TUTORIALS

APPLE II DISKETTE

2 Apple II Diskettes, 32K.....$69.00
2 Apple II Diskettes, 32K; Teacher's Edition; Workbook.....$82.90

Learning Computer Software Awards, 1982. "...program does an outstanding job of responding to both correct and incorrect answers..." **Courseware Report Card, Dec 1982.**

This software/workbook is designed to be used while you actually have your "hands on" the microcomputer. Students do not need to have any programming background; the workbook and software give students the capability of learning the BASIC programming language in a microcomputer assisted instructional mode. The workbooks are useful as reinforcement as students progress through the programs. Questions are included to stimulate student interaction with the microcomputer and test the student's understanding of the BASIC programming action. Includes Keyboard operation, Introduction to BASIC, Programming: Beginning, Program Input commands, Program Branching commands, Arrays, Character strings, Functions and subroutines, more. Tutorial software parallels chapters in the workbook. *NOTE: To utilize the special features of the Apple IIe with this program, please specify Apple IIe version when ordering.*



INTRODUCTION TO APPLE BASIC

MULIT-MEDIA
APPLE II DISKETTE

3 Apple II Diskettes, 48K; 10 Audio Cassettes Workbook.....$230.00

Enables students to start programming in BASIC, teaching the meaning and uses of commands and programming statements; the order in which the computer carries out arithmetic operations; the meaning and uses of variables; subroutines and loops; how to generate simple graphics; and more. Lessons are done directly at the micrcomputer keyboard, following directions from accompanying audio cassettes. Quizzes at the end of each lesson allow students to check their mastery of the principles taught. Includes 2 diskettes, 10 audio cassettes, workbook, worksheets for duplication, a teacher's manual, and a testing diskette. For use at the teacher's discretion, the testing diskette provides randomly generated text questions for groups of lessons. The teacher's manual includes a summary of each lesson, detailed guidelines for monitoring student progress, and answers to the worksheet exercises.

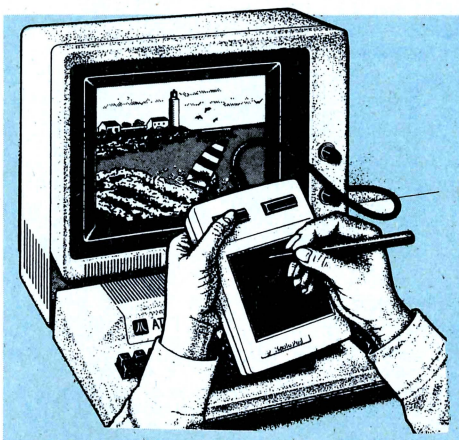
KNOW YOUR APPLE IIe

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$24.95

"...an interesting and informative piece of software...good introduction to the system." **Computing Teacher, Aug 1983.**

Let this program introduce you to all the capabilities of your Apple IIe computer. Especially for new users. The first program you should own.



KOALAPAD

APPLE II DISKETTE

KOALAPAD TOUCH TABLET WITH MICRO ILLUSTRATOR
1 KoalaPad; 1 Apple II Diskette, 48K.....$124.95

Recommended. **Electronic Learning, Oct 1983.** *"...highly recommended...for sheer fun and the excellent value they offer."* **InfoWorld, Oct 10, 1983.** *"...computer popcorn...they're delicious!"* **Compute! Jan 1984.** *"...fun and friendly..."* **Softalk, July 1983.**

A video sketch pad which eliminates the need for a keyboard. Students can control graphics, game commands and other computer functions by merely moving their finger across the special touch-sensitive surface of the KoalaPad. Excellent computer experience for the very young as well as a fascinating tool for any age. Accompanying the KoalaPad is the Micro Illustrator, a free-hand drawing and design tool which allows the student to draw, using several different brushes and colors. Students can design geometric shapes of all sizes, magnify their drawing for close-up work and changes, and can store their designs and drawings for later use. The popularity of this set will not be limited to students!

KOALA COLOR BOOK 1 (Geometric Design)
1 Apple II Diskette, 48K.....$29.95

A collection of geometric designs to be colored using the Micro Illustrator. Along with the on-screen designs are descriptions of how they were created using LOGO, and explanations of geometry terms.

KOALA COLOR BOOK 2
1 Apple II Diskette, 48K.....$29.95

Features additional graphics including flowers and snowflakes.

KOALA GRAPHICS EXHIBITOR
1 Apple II Diskette, 48K.....$39.95

A full-featured graphics package that enables users to modify, label, and print designs made on their KoalaPad. **Features:** "Cut and paste" parts of multiple pictures and create totally new designs; Add text to pictures in a variety of type styles and sizes; Print hard copies of pictures in either color or black and white; Compose and exhibit their own pictures in a continuously-running slide show. The "shows" can then be saved to disk.

KOALA LOGO DESIGN
1 Apple II Diskette, 48K.....$39.95

One of the very first applications products from the new educational programming language, LOGO. It allows you to create figures using the KoalaPad Touch Tablet while it "writes" the code for the shape in LOGO. It uses the LOGO packages designed for your computer, which must be supplied separately.

KOALA PROGRAMMER'S GUIDE
1 Apple II Diskette, 48K.....$19.95

Helps you take full advantage of all the KoalaPad tablet features. With it, you can develop your own software for the KoalaPad tablet. Includes smoothing algorithms, menu programs and many special hints and tips.

KOALA PROGRAMMER'S TOOL KIT
1 Apple II Diskette, 48K.....$39.95

An extensive collection of software tools to create new programs for the KoalaPad. The tools are programming routines in BASIC and machine language for reading KoalaPad input, creating graphics images and much more. Graphics include "rubber" lines, circles and boxes. For beginning to advanced programmers who want fast and creative tools for programming using Koalapad. Includes 20 unprotected tutorial examples in BASIC.

KOALA SPIDER EATER
1 Apple II Diskette, 48K.....$29.95

Your KoalaPad tablet becomes a keyboard in this challenge between musical notes and spirited spiders. Spider Eater teaches kids note recognition, meter, and composition as they zap spiders from the screen scurrying home to their webs.

KOALAGRAMS SPELLING 1
1 Apple II Diskette, 48K.....$39.95

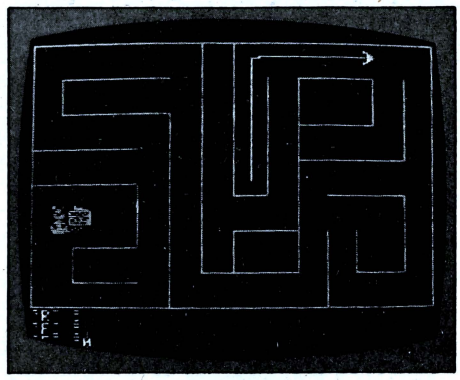
Hi-res educational spelling and word recognition game for children. The bear-cursor is moved about the screen to pick up letters and unscramble the words. There are many categories of words to choose from and clues are given for each word.

INTRODUCTION TO APPLESOFT BASIC

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup; Student Guide; Answer Key.....$51.00

Introduces students to elementary and intermediate level Applesoft BASIC programming. Intended for use in a classroom lecture setting, along with regular assignments given to the students. Approximately six weeks is required to cover the material, assuming five hours of classroom instruction per week. The text is divided into five chapters, each ending with a review quiz. Each chapter consists of several sections, each section ending with a set of exercises. Answers to the exercises and to the review quizzes are found in the separate answer book. Five chapters are: Output/Input, Looping, Functions, Data and Stings, and Special Features. The diskette contains copiable versions of sample programs and exercise solutions.



LEARNING THROUGH LOGO

APPLE II DISKETTE

1 Apple II Diskette, 48K; Activity cards.....$49.00

Grade level 3-6. A beginning course for the novice -- no experience required. Takes students through a step-by-step discovery of Logo commands to the concept of procedures. Teaches the Logo language while it enhances a student's creative ability. An activity diskette for making everything from mazes to maps reinforces learning. Teacher's guide. *NOTE: for 64K with Apple Logo.*

LET'S EXPLORE COMPUTER LITERACY

APPLE II DISKETTE

LET'S EXPLORE BASIC
1 Apple II Diskette, 48K, double-sided; Book.....$39.95

Ages 10 and up. A simple and complete introduction to BASIC programming. Follow-along 2-sided disk and 24-page book present BASIC with step-by-step simulations in an interactive tutorial format. Unique "play space" on Side 2 of the disk, allows user to create new programs. User's guide.

LET'S EXPLORE WORD PROCESSING
1 Apple II Diskette, 48K, double-sided; Book.....$39.95

Ages 10 and up. Learn word processing with a follow-along 2-sided disk and 24 page book. On Side 1, students practice with four exciting and highly interactive activities -- Keyboard Derby, Happy Text, Cursor Chase, and Easy Editor -- and then apply what they have learned using an actual, easy-to-use Word Processor. User's guide.

LOGO (by Terrapin)

APPLE II DISKETTE

2 Apple II Diskettes, 48K.....$99.95
Logo 10 Pack (Special package/10 copies, guide).....$299.95
Logo 20 Pack (Special package/20 copies, guide).....$525.00

Learning Computer Software Awards, 1982. "...solid, comfortable, dramatic, luxurious, well-documented, with outstanding performance..." **Creative Computing, Oct 1982.**

LOGO is a unique computer programming language designed to be an easy-to-use first computer language. It provides an environment for learning basic thinking skills. An interesting, simple-to-learn, yet ultimately powerful language for even first-graders to study, although certainly not just for children. It is an ideal first language for anyone learning to program. Using "turtle graphics" (a LOGO cursor called the turtle) the learner is in command and can quickly master LOGO's color, sound computation and graphic capabilities by moving the "turtle" on the screen. LOGO has been developed over the past ten years at M.I.T., and is truly a procedural language. It tries to blend the best of many languages. Besides true procedures, it also includes Interactive Operation...direct commands are allowed, just as in BASIC...; incorporation of turtle graphics; a line-oriented text editor; and an assembler. Includes a 250 page tutorial and technical manual. Runs as is on Apple IIe, but on Apple II+ it **requires a Language Card or a 16K RAM card** onto which the system is automatically loaded at boot-up. All-in-all a very complete language system, with clear and instructive implementation manual.

APPLE II (Apple II, Apple II+, Apple IIe, Apple IIc)

MAZE/TURTLE

APPLE II DISKETTE

1 Apple II Diskette, 64K; Worksheet.....$34.95

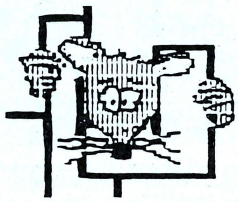
Exciting graphic introduction to Apple Pascal Operating System. Students travel through a maze as they learn the keystrokes to use the Pascal Editor, Filer and Compiler and to run Pascal programs. Includes reproducible student lab sheets and teacher suggestions. Requires UCSD Pascal.

MILLIKEN WORD PROCESSOR

APPLE II DISKETTE

3 Apple II Diskettes, 48K; Backup.....$69.95

Ages 7 and up. A great introduction for students to computer word processing. It teaches how to use the computer for composing, structuring, editing and filing written material. It has all of the basic word processing functions that adults use, but this program's graphics and explanations make it very friendly by describing word processing functions in terms of familiar concepts, such as file cabinet notebook and typewriter. Developing computer skills is important, and word processing is one of the most important and useful. The Milliken Word Processor will make learning this skill a pleasant experience. Teacher's guide.



MOUSE IN THE MAZE
(High School Level)

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$43.00

How would you tell a mouse to find its way through an unfamiliar maze? Always turn to the right? Make a random turn at each intersection? Students with only an introductory knowledge of basic can now write sophisticated maze-solving algorithms, program them into the computer and then have their mouse compete against others in the class. The computer displays a maze on its screen. The student's mouse must then find its way out of the maze in the shortest possible time. This package contains all the directions, rule sheets, and computer utilities to help a teacher conduct a programming contest or use the activity as a student's term project in a programming class.

PASCAL LEARNING AIDS

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$49.00

A collection of Pascal programs of increasing difficulty that can be studied and run as part of a course of study on the Pascal language. Sixty programs can be found on the diskette, and a listing of each one appears in the accompanying manual.

PROCESSING WORDS, Grades 6-9

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$36.00

Introduces the elementary concepts of word processing to students. The students use the classroom computer to enter, edit, and format text material. Using a simple electronic mail program, word processing concepts are applied to electronic form letters and mass mailings. Teacher's guide.

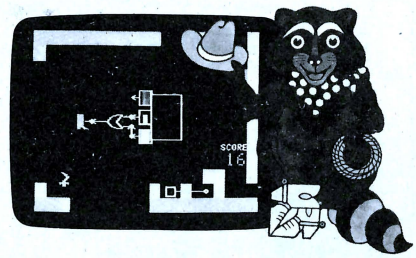
ROBOT ODYSSEY 1®

APPLE II DISKETTE

1 Apple II Diskette, 64K.....$49.95

A video game high in educational value which is an extension of the critically acclaimed *Rocky's Boots®* . In Robot Odyssey I a player must build and control robots so that s/he can escape from Robotopolis, a microworld filled with logical roadblocks and puzzles. In addition to problem-solving, it teaches the fundamentals of robotics and circuit design. Requires a color monitor. User's guide.

Robot Odyssey I is a trademark of The Learning Company.



ROCKY'S BOOTS®

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$49.95

Learning Computer Software Award, **Jan 1984.**

A game that helps build a basic groundwork in logic skills. Players build animated logic machines to score points in the game. While building the machines, they learn the basics of computer circuits. The machines operate a kicking boot and players score or lose points for "booting" particular objects. Rocky's Boots has the appeal of an arcade game with the content of a logic course. Color graphics; music and sound effects that can be turned on and off. Fun and challenging for all ages. Requires color monitor. Joystick and Mouse are optional.

Rocky's Boots is the trademark of The Learning Company.

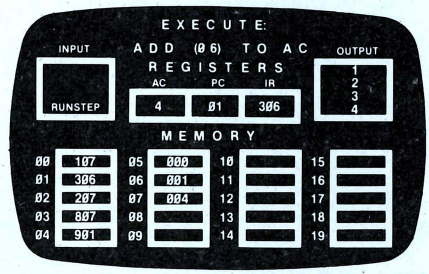
S.A.M. SOFTWARE AUTOMATIC MOUTH

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$99.95

"Excellent demonstration of the computer's capability to output spoken English." **Software Reports, 1983.**

Software-only speech synthesizer. Designed to give you all the power of conventional hardware speech devices without the hardware. Use it to write instructions that speak, stories that tell themselves, and creative new games with characters that converse or crack jokes. And you can do it all with ease with phonetic or plain English input. You choose the pitch, tone, speed and inflection...even the voice. Includes an 8-bit digital-to-analog converter and audio amplifier on a card. Requires 48K and a speaker. User's manual.



SIMULATED COMPUTER

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95

"A highly specialized graphics-centered program that demonstrates the operation of machine language in a small computer." **Learning, Dec 1982.** *Learning Computer Awards 1982.*

Grades 7-up. Gives students an immediate understanding of computers and machine language programming principles. Students begin by running sample programs as *Simulated Computer* describes every step, then write their own programs in simplified machine language. Teacher's guide.

TURTLE TRACKS

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95

Learning Computer Software Award, Jan 1984.

Designed to teach computer programming to beginners and children. Students learn to move the "turtle" on the screen to produce colorful drawings and designs. Helps youngsters feel comfortable with the computer as they learn programming.

VOICE

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95

The Voice gives your Apple the power of speech! Use the standard Voice vocabulary to speak an endless combination of phrases, or easily record your own vocabulary and make your Apple say anything you like. Each data disk stores up to 80 words or phrases which can be sorted for quick reference. What's more, the Voice allows you to speak from any BASIC program by using Print Commands. Needs no additional hardware.

STEP BY STEP SERIES

APPLE II DISKETTE

STEP BY STEP I

2 Apple II Diskettes, 32K; 4 Audio Cassettes; Backup; Workbook.....$99.95

"...a superb example of a successful blend of various media...teaching principles are sound, the execution is virtually flawless, and the whole thing works." **Popular Computing, Oct 1982.** *Recommended,* **Booklist, Sept 1, 1982.**

A combination of audio cassettes, workbook and computer. Teaches programming in BASIC computer language to the beginner. Introduces all important BASIC commands and programming logic. Works as follows: The computer program shows screen displays of sample program outputs, while the audio cassette explains to the student what is being shown. After each instructional segment, the student is asked a question or asked to solve a problem. The computer checks the student's work. When a lesson has been completed, the student turns off the cassette and goes to the Step By Step Workbook to review and practice the material covered in the lesson. After the practice assignment has been completed, the student takes a quiz. A final exam is included. In addition to clear, effective teaching, this program includes computer graphics, animation, sound effects, and a voice track.

STEP BY STEP II

2 Apple II Diskettes, 48K; 4 Audio Cassettes; Backup; Workbook.....$99.95

"The next best thing to having an experienced programmer by your side..." **Popular Computing.**

Teaches intermediate BASIC PROGRAMMING. Each course consists of interactive computer programs with a voice narration, quizzes and practice problems, and a detailed workbook containing supplementary activities. Among subjects covered are: PEEK and POKE, default values, bits and bytes, string arrays, memory maps, ASCII codes, control characters, RAM and ROM, binary numbers, hi-res graphics and others. In each lesson, the computer shows screen displays or sample program outputs while the narrator (via an audio cassette) explains what is being shown. At the end of each instructional segment, the user is asked a question or asked to solve a problem. The computer checks the person's work. After completing a practice assignment, the learner takes a quiz. A final exam is also included. Workbook also contains information on how to program music, and other information on game design and animation.

STEP BY STEP III

2 Apple II Diskettes, 48K; 4 Audio Cassettes; Backup; Workbook.....$99.95

The next step up of the series. The course teaches the disk operating system (DOS) and disk file management. Enables student to create data base software. Covers DOS commands, sequential and random access files, disk mechanics and more. Teacher's guide.

WELCOME ABOARD: A MUPPET CRUISE TO COMPUTER LITERACY®

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95

A comprehensive computer literacy package that is styled to involve both children and adults alike. Muppet crew members lead the ship's new computer operator -- that's the user -- on an entertaining cruise through five important computer applications. Captain Kermit teaches Programming; Gonzo helps Miss Piggy "look" for that special shipboard event, using Computer-Aided Design; Scooter explains the basics of Word Processing and Electronic Mail; and Fozzie Bear's Joke Library helps users learn Database Management. Easy-to-follow tutorials for each section. User's guide.

ENGLISH

TRS-80 MICROCOMPUTER, General Information

COMPUTER MODELS: Most programs listed in this section are designed to work on the Model I, Model III or Model 4. Program descriptions tell whether the material is available on cassette, diskette or both. Please specify cassette or diskette when ordering.

MEMORY: The amount of computer memory required to run each program is listed below each title. Be sure your machine has enough memory (or "K") to equal or exceed the amount required by the program. None of the programs in this catalog require more than 48K. Your computer dealer can usually add more memory modules if you need them.

LANGUAGE: All TRS-80 programs in this catalog require Level II BASIC (also called Model III BASIC).

NETWORKING: Many programs are available in Networking version. When a networking version is available, it is noted beneath the title. Networking versions may or may not cost extra. Please check individual titles for network prices. Also note: Management Systems usually do not operate on programs being networked. **BE SURE TO SPECIFY NETWORKING VERSION IF that is what you want, and tell us whether your school has a Network II or a Network III.**

IMPORTANT: *The materials listed in this section will run on the TRS-80 Model I, III, or 4. They will not run on the TRS-80 Color Computer. Please see page 78 for a separate listing of materials that will operate on the TRS-80 Color Computer.*

See also Teacher/Administrator section.

ALPHABET SEQUENCE AND ALPHABETIZING

TRS-80 DISKETTE ■■[P][I]■■■■

1 TRS-80 Diskette, 48K.....$59.95

"...excellent program for both our regular and special education students." **Computing Techer, Feb 1983.** *"...provides sound practice in alphabetizing at the basic level..."* **Curriculum Review, Aug/Sept 1982. Included in Minnesota State Department of Education High Quality Courseware List, 1984.**

Help students develop the skills of alphabet sequence and alphabetical order. Words alphabetized by the first, second, third, and fourth letters. A game follows each lesson. Sequential content moves from easy to more difficult. Immediate correction and feedback. Directions and sample exercises appear on-screen. Scoring at end of each lesson. Teacher's guide.

ALPINE SKIER SERIES

TRS-80 DISKETTE ■■■[I]■■■■

Complete Series (4 Sets; 4 Diskettes).....$113.75

"...examples of excellent graphics used to enhance a drill and practice session..." **School Library Journal, Aug 1982. Included in Minnesota State Department of Education High Quality Courseware List**

Students become Olympic class skiers while improving reading comprehension skills. A phrase or sentence appears on the screen and the student selects the appropriate response from choices on the screen. If the answer is correct, the skier proceeds down the slope. Anytime an incorrect answer is given the skier "wipes out" (complete with snow-flying graphics) and the student loses that race. Each program provides basic instruction in a specific comprehension skill needed to "race" and allows the teacher to quickly review the student's performance. Teacher's guide with each set.

ALPINE SKIER: DETERMINING FACT AND OPINION
ALPINE SKIER: SEEING CAUSE AND EFFECT
ALPINE SKIER: CATEGORIZING WORDS AND PHRASES
ALPINE SKIER: GETTING SENTENCE MEANINGS

(Each title, 1 TRS-80 Diskette, 48K.....$29.95)

BASIC READING SKILLS I SERIES

TRS-80 DISKETTE ■■■[I]■■■■

Complete Series (5 Sets; 5 Diskettes).....$300.00
Included in Minnesota State Department of Education High Quality Courseware List, 1984.

Reading is rewarding. Reading is for reasoning, researching, and relaxing. Reading can be all this, and more -- but only if you know how. Animated graphics, informative stories and guided questions provide practice. For grades 5 and up. User-friendly. Comprehensive teacher's guide with documentation.

BASIC READING SKILLS I: INTRODUCTION
1 TRS-80 Diskette, 16K.....$60.00

This title is an introduction and *must be viewed before using any of the Basic Skills Practice Programs.* Contains the following programs:

How to Recall Details
How to Identify the Main Idea
How to Draw Conclusions
How to Put Things in Order
Review of the Four Basic Skills

Any or all of the following Basic Skills Practice exercise the Four Basic Reading Skills above.

BASIC READING SKILLS I: PRACTICE A
1 TRS-80 Diskette, 16K.....$60.00
Contents: A Bicycle Trip; Fish for the Queen; Rent-A-Cow; Asparagus; People Bites.

BASIC READING SKILLS I: PRACTICE B
1 TRS-80 Diskette, 16K.....$60.00
Contents: Fisherman's Catch; Dieting; Toadstools; Prehistoric Life; Face of the Moon.

BASIC READING SKILLS I: PRACTICE C
1 TRS-80 Diskette, 16K.....$60.00
Contents: Tiny Nibbling Rabbits; Sleep Without Snoring; Pretty Fancy Fur; Insect Sense; Lost Ocean Liner.

BASIC READING SKILLS I: PRACTICE D
1 TRS-80 Diskette, 16K.....$60.00
Contents: Most Popular Pet; A Little Glitter; Old Globe; Longest Day; Right Things.

CAPITALIZATION PRACTICE

TRS-80 DISKETTE ■■■[I][J]■■

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides highly interactive guided drill in capitalization and motivates students with an arcade-style reward game. Students may select from capitalizing the first word in a sentence and the pronoun "I"; capitalizing proper personal names; the days of the week and the months; holidays and special days; and proper place names. A teacher-selected percentage of correct answers allows student to play a fun arcade-style game. Includes student management system. Teacher's guide.

COMMAS

TRS-80 DISKETTE ■■■[I][J]■■■

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides highly interactive guided drill in the use of commas, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Includes: Using commas in addresses, in dates, in series, in compound sentences, and to set off subordinate clauses. Students are presented with a run of sentences (the teacher determines the number) in which they must place commas in the correct positions. If they score a certain percentage, which may be adjusted by the teacher, they may choose to play an arcade-style game or to work another lesson. Teacher's guide.

CONTENT AREA READING SERIES

TRS-80 DISKETTE ■■■[I]■■■■

Provides practice in reading articles from content areas. Motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Each disk provides tutorial information explaining how different reading skills can be used to effectively comprehend particular content area materials. Articles are written at a 5-6 grade reading level while the interest level is appropriate for students through the high school level. Students choose one of the five articles to read and then, after reading it, answer questions pertaining to the article. Questions are divided into six categories of comprehension skills: main idea, vocabulary, details, fact or opinion, sequence, and inference. At the end of each run of questions students who score a certain percentage (which may be adjusted by the teacher) may play a challenging arcade-style game or choose to read another article. Student management system holds up to 200 student files. Teacher's guide with each title.

CONTENT AREA READING: LITERATURE
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: MATH
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: SCIENCE
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

CONTENT AREA READING: SOCIAL STUDIES
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

CUSTOMIZED ALPHABET DRILL

TRS-80 DISKETTE ■■[P]■■■■■

1 TRS-80 Diskette, 48K.....$59.95

Gives every student individualized practice in learning the alphabet. Four levels of difficulty: (1) filling in letters missing in an alphabetical sequence; (2) filling in a letter between two letters; (3) filling in a letter before a given letter; (4) filling in the letters before and after a given letter. Variable levels of difficulty. Immediate correction and feedback. Comprehensive teacher's guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

CUSTOMIZED CONCENTRATION BUILDER

TRS-80 DISKETTE ■■[P][I][J]■■■

1 TRS-80 Diskette, 48K.....$34.95

A concentration game that can help reinforce facts, lessons, and memory skills. Players must uncover matches. Matching pairs are provided by the program or teachers may easily provide their own matching material. Suggestions include: plurals; synonyms; antonyms; homonyms; Spanish/English vocabulary; shapes; math problems and answers. One or two can play, against the computer or against each other. Randomly chosen sketches hidden behind the matches increase student motivation to play again and again. Teacher's guide.

CUSTOMIZED "FLASH" SPELLING

TRS-80 DISKETTE ■■[P][I][J][H]■■

1 TRS-80 Diskette, 48K.....$59.95

Provides a highly motivating format for practicing spelling words. Contains a list of frequently used words. Teachers enter any list of words that fits their curriculum. Example: a weekly spelling test. Immediate correction and feedback. Increased speed and difficulty levels are automatically adjusted in response to the student's accuracy. Scoring appears on-screen at the end of each lesson. Comprehensive teacher's guide.

DIAGRAMMING SERIES

TRS-80 DISKETTE ■■■■[J][H]■■

5 TRS-80 Diskettes, 32K.....$145.00
5 Network 2 TRS-80 Diskettes.....$145.00
5 Network 3 TRS-80 Diskettes.....$145.00

A very well done tutorial and practice set. Learning-assisted programs provide full explanations and lead students through the diagramming process. All incorrect responses are followed by helpful explanations. Allows students to work independently. Begins with simple sentences, subject and verb, and progresses to more complex sentences. Large, easy-to-read diagramming grids make it easier for students to understand the parts of a sentence and how those parts are related. A proven and effective way to reduce grammatical errors in writing. Teacher's guide.

Diagramming I - simple sentences with modifiers
Diagramming II - simple sentences with modifiers, compound subjects and compound verbs, single subjects and compound verbs, compound subjects with single verbs and diagramming infinitives.
Diagramming III - compound sentences with modifiers
Diagramming IV - complex sentences with modifiers
Diagramming V - compound complex sentences with modifiers

(Each title, 1 TRS-80 Diskette, 32K.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)

FUNDAMENTAL WORD FOCUS

TRS-80 DISKETTE ■■[P][I][J]■■■

3 TRS-80 Diskettes, 48K.....$180.00

Classroom-tested practice techniques help students develop fluency and efficiency in word-recognition skills. Provides practice in word-analysis skills. Contains: alphabetical order; syllabication; prefixes; suffixes; compound words; vowels; syllables and other word-management skills. A student records disk is included and may be used with 48K and 2 disk drives are available. Words selected are high-frequency words. 10 Word Focus units, each with activities on different levels. Uses tested classroom and reading-clinic techniques. Motivational game-like activities. Teaching Theory Options (a feature only available to the teacher) states the objectives, prerequisites, levels, and word lists for each program. Comprehensive teacher's guide.

DICTIONARY SKILLS SERIES
(Word Mover)

TRS-80 DISKETTE P I

Complete Series (4 Sets; 4 Diskettes).....$139.80

This graded series of lessons provides practice on the skills of alphabetizing and using dictionary guide words. Alphabetizing begins with the first letter in early lessons to the fifth letter in later levels. The second program asks students to tell if a word comes before the page shown, after it, or is on the page, by using given guide words. Excellent practice for locating words in reference books. Teacher's guide each set.

DICTIONARY SKILLS, Grade 3
1 TRS-80 Diskette, 32K.....$34.95

DICTIONARY SKILLS, Grade 4
1 TRS-80 Diskette, 32K.....$34.95

DICTIONARY SKILLS, Grade 5
1 TRS-80 Diskette, 32K.....$34.95

DICTIONARY SKILLS, Grade 6
1 TRS-80 Diskette, 32K.....$34.95

ENGLISH ACHIEVEMENT SERIES

TRS-80 DISKETTE H

5 TRS-80 Diskettes, 32K; Backup.....$175.00
5 Network 3 TRS-80 Diskettes; Backup.....$525.00

"...the English Achievement series is a comprehensive package that should prove an excellent tool for both group instruction and individual student review." **Electronic Learning.**

Designed as a grammar practice for the College Entrance Examination Board's Composition Exam, this distinguished series of programs is also an excellent English grammar tutorial and review for high school students. Sentences containing errors are presented in batches of sixteen. When the student gives an answer, s/he is told whether the answer is correct or incorrect. In either case, the error involved and a correct rewrite with an explanation is given. The part of the sentence which is incorrect is high-lighted. The student is given encouraging remarks that indicate progress. If s/he misses one type of error more than twice, this is shown. After each batch of sixteen sentences an analysis is given to indicate kinds of errors being made and approximate Achievement score. The student may choose to continue with another batch of sentences, and the analysis is updated. Since each program in the series presents a different format which appears on the CEEB's English Achievement Examination, we recommend purchase of the complete series for successful College Board preparation. Teacher's guide with each set.

- English Achievement I
- English Achievement II
- English Achievement III
- English Achievement IV
- English Achievement V

(Each title, 1 TRS-80 Diskette, 32K; Backup.....$39.95)
(Each title, 1 Network 3 TRS-80 Diskette; Backup$119.85)

GRAMMAR SERIES

TRS-80 DISKETTE
or CASSETTE I

Complete Series (3 Sets; 3 Diskettes); Backup.....$145.00
Network 2/3 Series (3 Sets; 3 Diskettes); Backup....$290.00
Complete Series (2 Sets; 2 Cassettes); Backup.....$95.00

GRAMMAR 1
1 TRS-80 Diskettes, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00

The program randomly selects sentences and displays them on the screen. Each time the student presses the space bar the program will display a word from the sentence in a box on the screen. The student indicates whether it is or is not the part of speech being studied. A little robot on the screen will then look at the answer. If correct, the robot will jump up and down. Contents: Adjective Recognition; Adverb Recognition; Noun Recognition; Verb Recognition; Pronoun Recognition; Person, Place or Thing.

GRAMMAR 2
1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00
1 TRS-80 Cassette, 16K; Backup.....$50.00

Tutorials with definitions, explanations and examples. Drills are given to help reinforce learning. Contractions; Possessive Case; Prefix/Suffix; Spelling Rules.

GRAMMAR 3
1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00

Punctuation - covers period, comma, exclamation point, question mark, and colon. Includes rules and examples. Drill and practice. Requires student to insert correct punctuation in randomly selected sentences. **Capitaliztion** - capitalization rules utilizing numerous illustrations and examples. Drill and practice included. **Syllables** - drill and practice on syllable division. Student divides words into syllables. Immediate feedback. Shows correct division if student is incorrect. **Commonly Confused Words** - student tries to match commonly confused words with their definitions. Improves vocabulary and spelling.

FUNDAMENTAL PUNCTUATION PRACTICE

TRS-80 DISKETTE P I J H

Complete Series (3 Sets; 6 Diskettes).....$150.00

Provides instruction and practice in all major punctuation-usage skills for all students. More than 30 lessons in punctuation skills: periods; sentences; abbreviations and initials; question marks; commas; dates, addresses, quotes, conjunction, subordinate clauses, series, interrupters, pauses; exclamation marks; apostrophes; quotation marks; semicolons; parentheses. Each punctuation mark is first presented alone. After the skill has been mastered in several lessons, there are review lessons that present multi-skill practice. Incorrect responses must be corrected before next item will be presented. Controlled vocabulary levels. Teacher's guide.

FUNDAMENTAL PUNCTUATION PRACTICE, Grades 3-4
2 TRS-80 Diskettes, 48K.....$59.95

FUNDAMENTAL PUNCTUATION PRACTICE, Grades 5-6
2 TRS-80 Diskettes, 48K.....$59.95

FUNDAMENTAL PUNCTUATION PRACTICE, Grades 7-8
2 TRS-80 Diskettes, 48K.....$59.95

LANGUAGE ARTS CUSTOMWARE

TRS-80 DISKETTE P I

Dictionary skills, usage, figurative language, synonyms and antonyms -- those are just four of the nine skill strands covered in the program for grades 3-6. Each strand features five lessons with room on the disk to add five more lessons of your own. With the second disk you can also alter predeveloped lessons to fit your needs -- from making minor changes to revamping whole lessons! Two-disk customizing package includes lesson disk -- containing five prepared lessons with room for five more -- and Creation disk -- use to add, change, or delete prepared lessons. Creation disk can be used to change lesson parameters, including scoring graphics; to name disks and lessons; to change printer specifications; and to provide disk sequencing IDs. Nine skill strands present lessons at three to four levels of difficulty, giving you a total of 15 to 20 lessons per strand. Gives simple, easy-to-follow procedures for customizing lessons. To use Creation disk must have two disk drives. Teacher's guide with each title.

PREFIXES AND SUFFIXES CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Prefixes and Suffixes Customware, Grade 3
- Prefixes and Suffixes Customware, Grade 4
- Prefixes and Suffixes Customware, Grade 5
- Prefixes and Suffixes Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

CAPITALIZATION AND PUNCTUATION CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Disketttes).....$279.80
- Capitalization and Punctuation Customware, Grade 3
- Capitalization and Punctuation Customware, Grade 4
- Capitalization and Punctuation Customware, Grade 5
- Capitalization and Punctuation Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

ANALOGIES CUSTOMWARE
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Analogies Customware, Grade 3
- Analogies Customware, Grade 4
- Analogies Customware, Grade 5
- Analogies Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

SYNONYMS AND ANTONYMS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Synonyms and Antonyms Customware, Grade 3
- Synonyms and Antonyms Customware, Grade 4
- Synonyms and Antonyms Customware, Grade 5
- Synonyms and Antonyms Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

DICTIONARY SKILLS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Dictionary Skills Customware, Grade 3
- Dictionary Skills Customware, Grade 4
- Dictionary Skills Customware, Grade 5
- Dictionary Skills Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

SPELLING CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- SPELLING CUSTOMWARE, Grade 3
- Spelling Customware, Grade 4
- Spelling Customware, Grade 5
- Spelling Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

MULTIPLE MEANINGS CUSTOMWARE SERIES
Complete Series (4 Sets; 8 Diskettes).....$279.80
- Multiple Meanings Customware, Grade 3
- Multiple Meanings Customware, Grade 4
- Multiple Meanings Customware, Grade 5
- Multiple Meanings Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

FIGURATIVE LANGUAGE CUSTOMWARE SERIES
Complete Series (3 Sets; 6 Diskettes).....$209.85
- Figurative Language Customware, Grade 4
- Figurative Language Customware, Grade 5
- Figurative Language Customware, Grade 6

(Each title, 2 TRS-80 Diskettes, 48K.....$69.95)

IDENTIFYING PARTS OF SPEECH

TRS-80 DISKETTE I J

1 TRS-80 Diskette, 48K.....$39 95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides highly interactive guided drill in identifying parts of speech, and motivates students with an arcade-style reward game. Includes: identifying nouns, verbs, pronouns, adjectives, adverbs, and prepositions. A pre-set (by teacher) percentage of correct answers allows students to play an arcade-type game. Includes student management system. Teacher's guide.

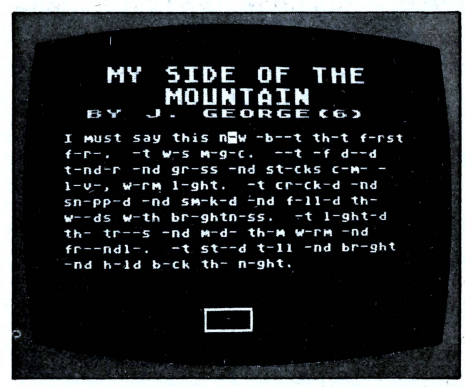
LANGUAGE SKILLS

TRS-80 DISKETTE
or CASSETTE I J H

10 TRS-80 Diskettes, 48K.....$275.00
10 Network 2 TRS-80 Diskettes.....$275.00
10 Network 3 TRS-80 Diskettes.....$275.00
11 TRS-80 Cassettes, 16K.....$275.00

Introduces parts of speech, punctuation, capitalization, phrases and clauses and related aspects such as comparison of adjectives, kind of nouns and kinds of verbs. Provides tutorial segment, gives examples and then completes lesson with a quiz. Management system included. Teacher's guide.
- Nouns
- Pronouns, Language Skills
- Adjectives, Language Skills
- Verbs and Adverbs
- Verb Tenses (Past, Present, Future)
- Prepositions and Conjunctions
- Phrases and Clauses
- Word Choice
- Punctuation and Capitalization
- Possessive Case (Adjectives, Nouns, Pronouns)

(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)
Except: Punctuation and Capitalization
(Each title, 2 TRS-80 Cassettes.....$29.95)



MISSING LINKS SERIES

TRS-80 DISKETTE I J

Best Educational Electronic Game, 1984. **Electronic Games Magazine.** *Recommended for purchase.* **Learning Magazine, Media Review, Popular Computing, Creative Computing.**

Language puzzle which improves students' reading, writing, spelling and grammar skills, while giving them an appreciation of syntax, vocabulary and the mechanics of writing. A passage -- from an outstanding selection of writings -- appears with letters or words missing. Students fill in the blanks by making educated guesses based on their built-in knowledge of word structure and spelling, grammar, meaning in context, and on their sense of literary style. Teacher's guide with each title.

MISSING LINKS: YOUNG PEOPLE'S LITERATURE
1 TRS-80 Diskette, 48K; Backup.....$55.00
1 Network 3 TRS-80 Diskette; Backup.....$165.00

Offers passages from nine classics of children's literature such as *Charlie and the Chocolate Factory* and *Little House on the Prairie.*

MISSING LINKS: MICROENCYCLOPEDIA
1 TRS-80 Diskette, 48K; Backup.....$55.00
1 Network 3 TRS-80 Diskette; Backup.....$165.00

A fascinating potpourri of factual information, from ice cream, elephants and airplanes, to bicycles, sharks and whales.

MISSING LINKS: CLASSICS, OLD AND NEW
1 TRS-80 Diskette, 48K; Backup.....$55.00
1 Network 3 TRS-80 Diskette; Backup.....165.00

Features eighty-one passages from Hemingway, Thurber, Shakespeare, Freud, Solzhenitsyn, Dickens, and more!

MISSING LINKS: ENGLISH EDITOR
1 TRS-80 Diskette, 48K; Backup.....$65.00
1 Network 3 TRS-80 Diskette; Backup.....$195.00

Enables you to tailor the game to your students' interest and needs by entering passages of your own choice.

LITERARY COURSEWARE

TRS-80 DISKETTE I J H

"excellent aid to the teacher who wants to encourage independent reading for any level student." **School Library Journal, Oct 1984.**

RETURN TO READING. Help your students get more out of the books they read! Even though teacher's time is limited, these programs allow each student to participate fully in individualized extended learning activities. Includes testing and measurement system. Best of all, it's fun! Students enjoy the responsive, interactive and self-paced computer activities. Advanced branching individualizes each lesson.

Each program consists of games and activities covering important elements of the book such as mood, setting, characterization and use of figurative language. Also includes comprehension questions on main ideas, details, sequence and vocabulary. Games and other exercises help students explore their feelings about the book, increases their understanding and appreciation, and encourages further reading.

Each program includes: 1 TRS-80 disk with backup, 16 page study guide, reproducible student response sheets, and a user's manual.

You will want several titles for your school collection.

Save on multiple purchases:
1-4 Titles, each title.....$70.00
5-9 Titles, each title.....$59.00
10-19 Titles, each title.....$55.00
Over 20 Titles, each title.....$49.75

ADVENTURE OF HUCKLEBERRY FINN
ADVENTURES OF TOM SAWYER
ALL QUIET ON THE EASTERN FRONT
ANIMAL FARM
BILLY BUDD
BLACK STALLION
BORN FREE
BRAVE NEW WORLD
CALL OF THE WILD
CHARLIE AND THE CHOCOLATE FACTORY
CHOCOLATE WAR
CRY THE BELOVED COUNTRY
DAY NO PIGS WOULD DIE
DIARY OF ANN FRANK
DRACULA
FAHRENHEIT 451
FAREWELL TO ARMS
FLOWERS FOR ALGERNON
GIANTS IN THE EARTH
GIFT OF THE MAGI/RANSOM OF RED CHIEF
GOOD EARTH
GREAT BRAIN
GREAT EXPECTATIONS
HEART IS A LONEY HUNTER
HOBBIT
JOHNNY TREMAIN
JULIUS CAESAR
LION, THE WITCH AND THE WARDROBE
LITTLE PRINCE
LORD OF THE FLIES
MARTIAN CHRONICLES
MIRACLE WORKER
1984
ODYSSEY
OF HUMAN BONDAGE
ONE DAY IN THE LIFE OF IVAN DENISOVICH
PEARL
PIGMAN
RAISIN IN THE SUN
RED BADGE OF COURAGE
RED PONY
ROMEO AND JULIET
SEPARATE PEACE
TALE OF TWO CITIES
TELLTALE HEART/CASK OF AMONTILLADO
TO KILL A MOCKINGBIRD
WHERE THE RED FERN GROWS
WHITE FANG/TO BUILD A FIRE
WUTHERING HEIGHTS

"Rated 'A' on educational usefulness, documentation and ease-of-use."
Software Reports

"My students said it is the single best tool in literature study I have given them."
Napoleon City School District, Ohio
Ken Neuenschwander, Language Arts Chairman

LIBRARY I.Q.

TRS-80 DISKETTE
or CASSETTE J H C

1 TRS-80 Diskette, 48K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00
1 TRS-80 Cassette, 16K; Backup.....$50.00
Designed to teach library skills to junior high, senior high, or college students. Covers handling and common maintenance of A-V software and equipment; definitions and descriptions of common terms and tools associated with A-V equipment and software ordinarily found in school libraries. Explains the use of the card catalog and drills students in the basics of using it; teaches basic skills needed to use the library -- including readers' guide to periodical literature; and provides drills in definitions associated with using the library. Includes topics such as the vertical file, periodicals, and reference material. Teacher's guide.

NEWBERY WINNERS

TRS-80 CASSETTE I J

"...provides a welcome addition to microcomputer courseware for the language arts classroom." **Language Arts, Oct 1983.**
Team Newbery Award books with microcomputer activities and provide your students with an exciting extension of their reading experiences. Each book is accompanied by courseware containing 4 programs of vocabulary and comprehension drills and games. An instruction manual fills you in on everything you need to know, from loading the programs into the computer to printing out students' answers. A story guide for each book provides story synopses, reading levels and printout of each program's contents. Printer optional. Each title includes a softcover book and a teacher's guide. Regular vesion comes on cassette only. Networking version available on diskette only.

Bridge to Terabithia
Call It Courage
Cricket in Times Square
Dark Is Rising
Great Gilly Hopkins
Island of the Blue Dolphins
King of the Wind
Mrs. Frisby and the Rats of NIMH
My Side of the Mountain
Slave Dancer
Sounder
Summer of the Swans
Westing Game
Witch of Blackbird Pond
Wrinkle in Time

(Each title, 1 TRS-80 Cassette, 16K.....$25.00)
(Each title, 1 Network 2/3 TRS-80 Diskette, Backup$75.00)

PARTS OF SPEECH

TRS-80 DISKETTE
or CASSETTE I J

1 TRS-80 Diskette, 32K; Backup.....$35.00
1 Network 2/3 TRS-80 Diskette; Backup.....$70.00
1 TRS-80 Cassette, 32K; Backup.....$35.00
In this program, each of the parts of speech are illustrated with examples. Drills are provided in which the student must identify the part of speech for each of the words in randomly selected sentences. Scoring is provided at the conclusion of the drill and practice session. Backup.

PIK-PEK-PUT SERIES

TRS-80 DISKETTE I

Complete Series (8 Sets; 8 Diskettes).....$227.50
Network 2/3 Series (6 Sets; 6 Diskettes).....$341.75
Students put their word skills to work against the computer in a game of strategy much like Tic-Tac-Toe. The Pik-Pek-Put grid has a word in each of its squares. Students choose the square they wish to mark by moving the cursor, then affixing the word in the square. A correct response gets an X. A wrong answer gets no mark. The computer then takes its turn, choosing the square missed by the student or any other unplayed square and affixing a word to mark an O. First to get three in a row wins. The computer provides basic instruction in the skill needed to play each game and allows the teacher to quickly review the student's performance. Teacher's guide each set.

PIK-PEK-PUT: SUFFIXES 1
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: SUFFIXES 2
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: PREFIXES 1
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: PREFIXES 2
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: CONTRACTIONS
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: BASE WORDS
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

PIK-PEK-PUT: PLURALS
1 TRS-80 Diskette, 48K.....$29.95

PIK-PEK-PUT: POSSESSIVES
1 TRS-80 Diskette, 48K.....$29.95

PUNCTUATION AND CAPITALIZATION, Grades 1-8, SERIES

TRS-80 DISKETTE P I J

Complete Series (6 Sets, 6 Diskettes).....$174.95
Network 2/3 Series (6 Sets, 6 Diskettes).....$349.90
User-oriented programs enable students to edit sentences to correct errors in punctuation and capitalization. No typing skill is required. Changes are made by selecting changes from a menu of choices. **Features:** Carefully graded sequence of skills; 10 lessons per grade level; Covers skills included in most standardized tests; Complete user control; Automatic error checking; Self scorring -- immediate feedback upon lesson completion; Examples given -- easy to use. Teacher's guide. A Micro School Program from Bertamax, Inc.

PUNCTUATION AND CAPITALIZATION, Grades 1-3
PUNCTUATION AND CAPITALIZATION, Grade 4
PUNCTUATION AND CAPITALIZATION, Grade 5
PUNCTUATION AND CAPITALIZATION, Grade 6
PUNCTUATION AND CAPITALIZATION, Grade 7
PUNCTUATION AND CAPITALIZATION, Grade 8

(Each title, 1 TRS-80 Diskette, 32K.....$34.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$69.90)

READING SKILLS LAB SERIES

TRS-80 DISKETTE P I

"...polished, well-constructed design...meaning-emphasis approach to reading." **Courseware Report Card, 1983.**
Comprehensive reading package helps develop skills in a variety of areas necessary to good reading. Programs for each grade level use a core vocabulary list containing words which occur most frequently in the most widely-used basal reading series. Also includes original short stories by professional children's authors. Stories have been selected for high interest value, and are matched to the reading level of each set. Each story has its own set of exercises to provide additional practice in using the core vocabulary words at each grade level. Optional printer module allows teacher to prepare printed exercises for use by students away from the computer. These exercises are similar to the main exercises and may be used in a variety of ways. Teacher specifies whether all copies should be identical, or different. Computer can randomly choose in order to provide a distinct exercise for each student. Teacher's guide each set.

The following programs are included for each grade level:

Matchword - Word recognition drill that gives practice in visual discrimination, left-to-right directionality, and scanning for a particular word.

Meanings - Additional practice with the core vocabulary words, with the added dimension of meaning. The student is asked to match a word to its meaning or synonym.

Sentence Sense - The core vocabulary words used in context. This program also deals with word meanings; the student is asked to choose the word which best fits into a given sentence.

Reading Fun - Contains the stories for actual reading practice. Students may "page" forward or backward in the story as it is presented on the screen. Each story is preceded by pre-reading vocabulary exercises, and followed by comprehension exercises and post-reading vocabulary exercises. The comprehension exercises include questions on details in the story, the main idea, and some inference questions.

Word Fun - Each level includes a word game that incorporates the core vocabulary words by additional reinforcement. These games differ from one level to another; some may also be printed on the printer.

READING SKILLS LAB A
2 TRS-80 Diskettes, 32K.....$199.00
2 Network 3 TRS-80 Diskettes.....$199.00
Grade levels 1-3.

READING SKILLS LAB B
2 TRS-80 Diskettes, 32K.....$199.00
2 Network 3 TRS-80 Diskettes.....$199.00
Grade levels 4-6.

RIDDLE ME THIS

TRS-80 DISKETTE I

Complete Series (3 Sets; 3 Diskettes).....$85.25
Network 2/3 Series (3 Sets; 3 Diskettes).....$170.95
Best Microcomputer Software of the Year, **Learning Magazine.** *Learning Computer Software Award, Jan 1984.*
Combines sheer enjoyment with solid achievement in basic reading skills. The computer becomes a riddler, arousing curiosity and challenging students' word recognition skills. Graphics heighten enjoyment of the riddles. Students may be asked to type the correct two-word form of a contraction, to think of a homonym, or to type a possessive showing the relationship between two things mentioned in the riddle. The computer provides basic instruction in each specific word skill needed to participate in the program and allows the teacher to quickly review the students' performance. Teacher's guide with each set.

RIDDLE ME THIS: HOMONYMS
RIDDLE ME THIS: CONTRACTIONS
RIDDLE ME THIS: POSSESSIVES

(Each title, 1 TRS-80 Diskette, 48K.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$59.95)

READINESS SKILLS

TRS-80 DISKETTE E P

Developed by specialists in Early Childhood Education, these programs address specific skills and are curriculum based. Because the users of these programs are younger, the graphics are colorful and fun to use, but they are not games. They are learning materials designed to be used by individual students or small groups. Comprehensive teacher's handbook includes reinforcement activities and testing materials. Your students will have fun with these materials, and you will be pleased that they are learning.

CLASSIFICATION: READINESS SKILLS
5 TRS-80 Diskettes, 32K.....$145.00
5 Network 2/3 TRS-80 Diskettes.....$145.00
Classification: Matching - Matching and comparing objects, shapes and colors.
Classification: Sorting - Sorting objects into group families.
Classification: Forms and Objects - A variety of physical attributes are used in combinations and alone.
Classification: Familiar Settings - Classifying items found at home and in school
Classification: Settings - Variety of settings for classifying objects and animals.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)

ORDERING/SEQUENCING
4 TRS-80 Diskettes.....$115.00
4 Network 2/3 TRS-80 Diskettes.....$115.00
Ordering/Sequencing: Seriation - Arranging objects into simple seriation patterns according to size and time sequence.
Ordering/Sequencing: Patterning - Identifying, constructing and completing simple to complex patterns.
Ordering/Sequencing: Complex Patterns - Construction and completion (multi-directions, more than 3 attributes).
Ordering/Sequencing: Size and Time - Subtle size and time sequences requiring completion and ordering.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)

SPATIAL RELATIONSHIPS: READINESS SKILLS
8 TRS-80 Diskettes.....$230.00
8 Network 2/3 TRS-80 Diskettes.....$230.00
Spatial Relationships: Geometric Shapes - Recognition and construction of geometric shapes.
Spatial Relations: Left to Right - Left to right progression.
Spatial Relations: Letters - Letter recognition and formation.
Spatial Relations: Geometric Forms - Construction and practice with complex 2 dimensional forms.
Spatial Relations: Symmetry - Construction and identification of symmetrical designs.
Spatial Relations: Rotation - Rotating objects and shapes; forming complex patterns.
Spatial Relations: 3 Dimensions - Introduction of 3 dimensional shapes.
Spatial Relations: Concepts - Beside, in front of, behind, around, through.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)

COUNTING SKILLS
9 TRS-80 Diskettes.....$260.00
9 Network 2/3 TRS-80 Diskettes.....$260.00
Counting Skills: One to One - One to one correspondence.
Counting Skills: Number Recognition - Ordinal and cardinal.
Counting Skills: Beginning Sets - Beginning set theory.
Counting Skills: Number Recognization 5-10 - Recognition and formations of numerals 5-10.
Counting Skills: Matching - Matching numerals 5-10 to sets of objects.
Counting Skills: Sets – Equal and Joining - Identifying equal sets and presentation of joining sets.
Counting Skills: Number Recognition 10-20 - Recognition and formation of numerals 10-20.
Counting Skills: Assigning Numbers - Assigning numerals 10-20 to correct number of items.
Counting Skills: Addition and Subtraction - Single digit addition and subtraction using pictures along with numerals.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)

LANGUAGE ARTS: READINESS SKILLS
5 TRS-80 Diskettes.....$145.00
5 Network 2/3 TRS-80 Diskettes.....$145.00
Language Arts: Letter Recognition - Recognition and formation of lower case manuscript letters.
Language Arts: Letter Matching - Matching upper and lower case manuscript letters.
Lanuage Arts: Word Families - Introduction to and formation of word families (at/et/it/en/and).
Language Arts: Beginning Consonants - Identifying beginning consonant sounds of familiar objects.
Language Arts: Rhymes - Identifying rhyme labels through the use of pictures.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)

SAT AND STANDARDIZED TEST PREPARATION

COMPUTER SAT

TRS-80 DISKETTE JH
2 TRS-80 Diskettes, 48K; Book.....$79.95
Here is the SAT preparatory course that can significantly raise actual test scores. And what's more -- It's Fun! Combines test-taking with diagnostic appraisal of student performance in all test areas. Provides a section-by-section individualized study plan custom tailored to each student's needs. 540 drill items and 1000 electronic vocabulary flash cards provide immediate feedback and overall score. Presents successful strategies and builds general test-taking skills. Each student controls the rate at which all material is presented. Progress directly correlated to the student's own ability. Slow learner does not fall behind and the advanced student can quickly leave those parts of the exam that are "too easy". Provides a series of explanatory strategies which not only explain a specific answer but develop general test-taking skills that insure future success. When students complete this program they will be totally prepared for the examination that lies ahead. They know what type of questions to expect and the proven strategies for answering them. They've had valuable practice that has significantly raised their level of performance. These students have developed the necessay test-taking skills that lead to a sense of calm and confidence on the day of the actual SAT. Includes a 470 page manual "How to Prepare for the SAT" and a User's Manual.

ENGLISH ACHIEVEMENT SERIES *See write-up this section.*

SPEEDREAD PLUS

TRS-80 DISKETTE J H C A
2 TRS-80 Diskettes, 48K.....$64.95
Uses time-proven techniques to train you to instantly recognize words and phrases. Exercises your peripheral vision, improves your eye movement and timing, and generally works with you at your pace. Offers four modes for reading text: single phrase for developing phrase recognition at high reading speeds; double phrase for developing eye movement and timing; random phrase for developing peripheral vision; and column phrase for training the eyes to read narrow text as found in newspapers and magazines with one-stop-per line. Allows selection of any combination of phrase widths and speeds with each of the four modes. Three classic texts provided for speed reading exercises: Outcasts of Poker Flat (Bret Harte); Rip Van Winkle (Irving); Legend of Sleepy Hollow (Irving). Has a text editor which allows user to enter his own text as well as exam questions and answers to test comparison. Teacher's guide.

SPELLING DEMONS, COMPUTER SPELL DOWN

TRS-80 DISKETTE P I J
1 TRS-80 Diskette, 48K.....$59.95
Provides drill and practice on the 100 most commonly misspelled words for each grade, 2-9, based on the *Educators Guide to Spelling Research and Practice* by Bradley M. Loomer. Deliberate repetition of the spelling words within the context of the sentence. Displays misspelled words at the end of each lesson for further study. Student chooses from three spelling versions of each word. (The distractors are the most common misspellings of the correct word.) Disk version automatically presents the appropriate lesson, keeps track of words not mastered, and presents the next lesson. Comprehensive teacher's guide.

SPELLING IMPROVEMENT GAMES

TRS-80 DISKETTE P I J
1 TRS-80 Diskette, 48K.....$34.95
These user-friendly games offer students a variety of ways to improve spelling. Words are chosen at random from lists of at least fifty words; clear instructions permit the teacher to modify the list of words. Players have the option of asking for hints when they need help. Correct answers are rewarded. Contents: Speedspell; Hangman; Bumper Plurals. Teacher's guide.

SPELLING LESSON AIDS (Word Package)

TRS-80 DISKETTE P I J
1 TRS-80 Diskette, 32K; Backup.....$50.00
Flash Spelling - Maintains a disk file of word lists. Words can be added, changed, or deleted from any of the files. Words are randomly selected and flashed on the screen. User then spells the word. 20 speeds. **Word Scramble** - Student unscrambles words randomly selected from word files. **Word Search** - Makes word puzzles from a list of words provided by the teacher. **Alphabetizing** - 3 levels of difficulty. **Word Adventure** - User tries to spell a word by choosing one letter at a time. Hero stands on a narrow ledge; ledge becomes more narrow if letter selected is not in the word; when user has spelled a word, he/she can swing across the pit safely.

SPELLING WITH MANAGEMENT

TRS-80 DISKETTE P I
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95
Provides drill in spelling, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Two hundred words are permanently stored on the disk, and teachers may enter up to five lists of 20 words each. Teachers choose the group of words to be used and the number of words to be presented in each run. Exercises include: Filling in missing letters of words, Selecting the correct spelling from 3 choices, Unscrambling the spelling words. Teacher's guide.

STEPS TO SPELLING BREAKTHROUGH SERIES

TRS-80 DISKETTE P I J
Complete Series (3 Sets; 6 Diskettes).....$288.00
Unique 4-level spelling skills program that is ideal for elementary and secondary students who need remedial help. Words are chosen from the *New Iowa Spelling Scales* and *Arthur Gates' Spelling Difficulties in 3,876 Words.* Students will be challenged by context exercises, word games and puzzles, and drill and practice as they learn to overcome and spell difficult words correctly. Teacher's guide.

STEPS TO SPELLING BREAKTHROUGH 1
2 TRS-80 Diskettes, 32K.....$96.00
This program concentrates on words misspelled by 50% of students in grade 2, 3, and 4.

STEPS TO SPELLING BREAKTHROUGH 2
2 TRS-80 Diskettes, 32K.....$96.00
Words misspelled by 50% of students in grades 5 and 6 are the focus of this program.

STEPS TO SPELLING BREAKTHROUGH 3
2 TRS-80 Diskettes, 32K.....$96.00
Difficult words, misspelled by 50% of students in grades 7 and 8 are the focus of this program.

STORYBOOKS OF THE FUTURE COURSEWARE

TRS-80 DISKETTE E P
For beginning readers. Includes a delightful story with music and animation, followed by related learning activities and games. Teacher's guide each set.

BETTER VIEW A ZOO
1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 3 TRS-80 Diskette; Backup.....$165.00
Recommended, **Courseware Report Card.**
Starts off with a story-poem adventure about a boy and girl searching for wild animals in a jungle. Six theme-related activities and games, such as **Snake Slide** and **Tiger Hunt**, focus on number and letter identification, counting, and the concepts of up/down and left/right. Teacher's guide.

SPACE WASTE RACE
1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette; Backup.....$165.00
"All excellents." **InfoWorld.**
Humorous story about transporting waste to the moon entices students into five learning activities and games with imaginative themes. Students practice counting, number and letter identification, using the concepts of over/under, above/below, up/down, right/left. Teacher's guide.

STORY STARTER

TRS-80 DISKETTE P
1 TRS-80 Diskette, 48K.....$59.95
Provides practice in constructing stories using cause/effect and time/sequence patterns. Four different sequences: "Because," "When," "Then," and "Story Line". Three levels of difficulty, with 10 different opening lines for each level. Student provides the remainder of the content. Several students can work as a team to create a story. Comprehensive teacher's guide.

SYNONYM SEARCH

TRS-80 DISKETTE
or CASSETTE I J H
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 TRS-80 Cassette, 16K; Backup.....$45.00
Three "game" programs – easy, advanced, expert. Objectives of these programs are to expose students to a large assortment of synonyms, to have the students recognize and match synonym pairs, and, in so doing, expand the learners' vocabulary and ability to analyze words to determine their meanings. Each program includes a library of 200 synonym pairs, a total of 1,200 words and terms used in the games. **Game 1** - uses fairly common words in the synonym pairs. **Game 2** - uses more difficult words. **Game 3** - the Expert program and anything goes. Includes uncommon, difficult, and obscure words and terms that will challenge even the most scholarly.

LEVELS
S E P I J H C A
S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

SYNONYMS/ANTONYMS/ HOMOPHONES SERIES

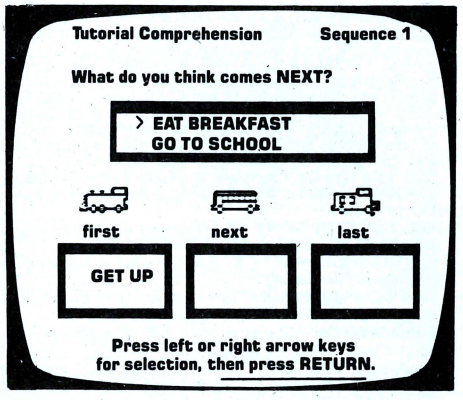
TRS-80 DISKETTE P I

Complete Series (3 Sets; 3 Diskettes); Backups.....$90.00

Multi-level program. Tutorial and testing for these important concepts. Each level consists of a pre-test/content area/tutorial screens/and post test. Includes concentration game for synonyms, antonyms, and homophones. Controlled vocabulary. Immediate positive feed-back for all students responses. Written by teachers for teachers!

SYNONYMS/ANTONYMS/HOMOPHONES Level 1
SYNONYMS/ANTONYMS/HOMOPHONES Level 2
SYNONYMS/ANTONYMS/HOMOPHONES Level 3

(Each title, 1 TRS-80 Diskette, 48K; Backup.....$35.00)



TUTORIAL COMPREHENSION

TRS-80 DISKETTE P I

Complete Series (5 Sets, 20 Diskettes).....$995.00

Not even a teacher's aide can provide this much individualized comprehension instruction. Tutorials and practice lessons in five key comprehension skills: Main Idea, Details, Sedquence, Inference, Critical Reading. A variety of interrelated concepts and instructional approaches are used to teach the five key comprehension skills. For example, to teach Main Idea, three sequential concepts are introduced: Categorizing, Topic Sentences, and Unstated Main Idea. All tutorial lessons are written at levels 2 and 3 so that vocbulary won't prevent skills mastery. Reading levels in practice lessons range from grades 2-6. Depending on how students score, they are directed automatically to either the next tutorial or to more practice. Emphasis on the five comprehension skills that are most critical to reading success. Each skill is arranged into sub-skills that are presented sequentially. A variety of instructional strategies are used to teach the same skill. Abundant practice lessons are linked to tutorial lessons. Controlled vocabulary. Comprehensive teacher's guide includes rationale and clear instructions for use. Pre- and post-tests are ideal for diagnosis.

MAIN IDEA
4 TRS-80 Diskettes, 48K.....$225.00
Main Idea, Grades 2-3
Main Idea, Grades 3-4
Main Idea, Grades 5-6
(Each title, 2 TRS-80 Diskettes.....$79.95)

DETAILS
4 TRS-80 Diskettes, 48K.....$225.00
Details, Grades 2-3
Details, Grades 3-4
Details, Grades 5-6
(Each title, 2 TRS-80 Diskettes.....$79.95)

SEQUENCE
4 TRS-80 Diskettes, 48K.....$225.00
Sequence, Grades 2-3
Sequence, Grades 3-4
Sequence, Grades 5-6
(Each title, 2 TRS-80 Diskettes.....$79.95)

INFERENCE
4 TRS-80 Diskettes, 48K.....$225.00
Inference, Grades 2-3
Inference, Grades 3-4
Inference, Grades 5-6
(Each title, 2 TRS-80 Diskettes.....$79.95)

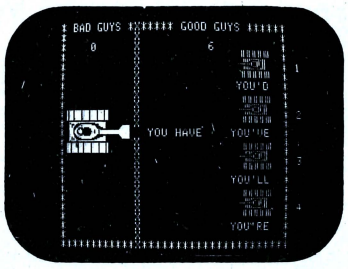
CRITICAL READING
4 TRS-80 Diskettes, 48K.....$225.00
Critical Reading, Grades 2-3
Critical Reading, Grades 3-4
Critical Reading, Grades 5-6
(Each title, 2 TRS-80 Diskettes.....$79.95)

WINNING WITH PHONICS

TRS-80 DISKETTE P I

1 TRS-80 Diskette, 32K.....$39.95

Outstanding game program provides an encyclopedic 1,289 examples that give practice in virtually all structural or phonetic parts of words. Meets IEP requirements. Grades 2-4.



TANK TACTICS

TRS-80 DISKETTE I

Complete Series (7 Sets; 7 Diskettes).....$197.50
Network 2/3 Series (5 Sets; 5 Diskettes).....$284.75

Students take on the dreaded "Super Tank" in a battle to end all battles. It's the "good guys" against the "bad guys" as students use their word skills to win the day. The Super Tank fires a word or word root and students must block the shot by choosing the correct affix (exact procedure depends on the specific skill being taught in that program). Ten correct responses spells victory for the student. Triumph is rewarded with closing graphics showing the "Super Tank" being wiped out. Defeat earns the student only words of encouragement for the next battle. Each program provides basic instruction in the word skill needed to play and allows the teacher to quickly review the students' performance. Teacher's guide each set.

TANK TACTICS: CONTRACTIONS
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

TANK TACTICS: SUFFIXES 1
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

TANK TACTICS: SUFFIXES 2
1 TRS-80 Diskette, 48K.....$29.95

TANK TACTICS: PREFIXES
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

TANK TACTICS: BASE WORDS
1 TRS-80 Diskette, 48K.....$29.95

TANK TACTICS: HOMONYMS
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

TANK TACTICS: PLURALS
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$59.95

VOCABULARY BUILDER

TRS-80 DISKETTE H

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00

Consists of a series of five programs that offer three different formats of vocabulary drills: the definition is given and the user selects the word from a list of alternatives; the word is given and the user selects the definition from a list of alternatives; the user matches words and definitions. The package contains over 1000 words.

WATCH YOUR LANGUAGE

TRS-80 DISKETTE I J

1 TRS-80 Diskette, 32K (6 programs).....$149.00
1 Network 2/3 TRS-80 Diskette (6 programs).....$149.00

These programs present a brief tutorial and extensive drill on the various parts of speech: nouns, adjectives, verbs, adverbs and prepositions. Each program includes a definition of the part of speech, instruction on its use and recognition in a sentence. Third, a sentence is presented and the student is asked to type a list of all the words in the sentence that are used as the part of speech being studied. Teacher's guide.

PERSON, PLACE OR THING (Nouns)
1 TRS-80 Diskette, 32K.....$30.00
1 Network 2/3 TRS-80 Diskette.....$30.00

TELL ME ABOUT IT (Adjectives)
1 TRS-80 Diskette, 32K.....$30.00
1 Network 2/3 TRS-80 Diskette.....$30.00

LIGHTS, CAMERA, ACTION (Verbs)
1 TRS-80 Diskette, 32K.....$30.00
1 Network 2/3 TRS-80 Diskette.....$30.00

WHERE, WHEN, HOW AND WHY (Adverbs)
1 TRS-80 Diskette, 32K.....$30.00
1 Network 2/3 TRS-80 Diskette.....$30.00

I HAVE A PREPOSITION FOR YOU (Preposition)
1 TRS-80 Diskette, 32K.....$30.00
1 Network 2/3 TRS-80 Diskette.....$30.00

WHAT PART DO YOU PLAY
1 TRS-80 Diskette, 32K.....$25.00
1 Network 2/3 TRS-80 Diskette.....$25.00

To be used after mastering previous sets. Drills students on nouns, adjectives, verbs, adverbs and prepositions in sentence context. A sentence is presented followed by one of the words in the sentence. Student must identify which part of speech that word is.

VOCABULARY DEVELOPMENT: WRITE YOUR OWN PROGRAMS

TRS-80 DISKETTE P I

1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$29.95

A non-violent hangman game...plus! Designed to be used in any curriculum or for any level of ability. The word lists and clues are created by the teacher or student. Ease of operation and understandable instructions make this program practical for individual or team use.

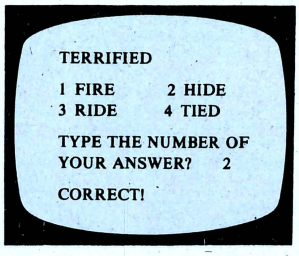
WORD BLASTER

TRS-80 DISKETTE P I

2 TRS-80 Diskette, 48K.....$150.00

"...appealing reading practice..." **Booklist, March 1, 1984.**
"...proven to be appropriate for both remedial and gifted students." **Teaching and Computers, Oct 1983.**

Uses cloze techniques to develop reading vocabulary and sentence comprehension skills for students in grades 2 through 6. Contains 540 different sentences, divided into seven levels of reading difficulty. The sentences for each grade level are grouped into three categories of difficulty: one year below grade level; grade level; and one year above grade level. Each lesson in the program consists of 12 sentences. Four of these sentences emphasize graphophonemic cues, four emphasize syntactic cues, and four emphasize semantic cues. There are nine lessons per grade level. Develops comprehension and vocabulary skills in context. Uses modified cloze activities. Rewarding motivational format uses a "shooting gallery" approach to the selection of the correct missing word. If the appropriate word is "blasted", it moves to its correct position in the sentence. Immediate correction and feedback. Teacher's guide.



WORDS ARE FUN SERIES

TRS-80 DISKETTE P I

Complete Series (2 Sets; 2 Diskettes).....$258.00
Network 2/3 Series (2 Sets; 2 Diskettes).....$258.00

WORDS ARE FUN, Set 1
1 TRS-80 Diskette, 32K.....$129.00
1 Network 2/3 TRS-80 Diskette.....$129.00

"...builds vocabulary and reading skills with style, grace and charisma." **80 Microcomputing.**

Helps develop awareness of spelling patterns. Grades 2-4. **Wordmaster** - Phonograms exercises. Variety of exercises with each of 12 common word families. Student may select a particular phonogram with which to work or may choose to be given a random selection by the computer. **Spellcaster** - Practice with a spelling list of the teacher's choice. Actually 2 programs: *Spellbuilder* allows the teacher to build data files containing weekly spelling list; *Spellcaster* reads those files and uses them in vairous exercises. Options include: List all the words; Flash words; Guess the missing letter; Patterns; Hangman. **Reword** - Rearrange one word into another. uses 3-letter and 4-letter words. The word is presented on the screen; the student must change it to form a different word by rearranging its letters. **Snerd** - Creative writing. Students "construct a creature" by providing descriptive phrases in response to prompts on the screen. The phrases are inserted into a short "story" and students are encouraged to draw pictures of their creation. **Words in Words** - Recognition of spelling patterns. Students must identify which of four 4-letter words cannot be made from the letters in a longer word. Draws attention to the use of specific letters in the spelling of the words. Teacher's guide.

WORDS ARE FUN, Set 2
1 TRS-80 Diskette, 32K.....$129.00
1 Network 2/3 TRS-80 Diskette.....$129.00

A variety of word exercises. Grades 4-7. **Snookies** - Preposition identification. Includes 30 sentences containing 1-6 prepositions each. Student lists all the prepositions he can find; then friendly Snookie appears for each preposition correctly identified. Prepositions missed are pointed out by the Grelb, a somewhat more sinister figure. **Subject at Hand** - Finding the subject of a sentence. A series of simple sentences is presented. Student must identify the subject. **Hangman** - Familiar word-guessing game. Contains 2 resident lists of 50 words each, or the student or teacher may enter a different list of up to 50 words. Six incorrect guesses result in a "hanged man". **Scrambled Words** - Rearrange letters to form a word. **Jotto** - A word-deduction game. computer selects secret 5-letter word that student must guess. Teacher's guide.

MATHEMATICS

ALGEBRA: BASIC SKILLS

TRS-80 DISKETTE
or CASSETTE [S][E][P][I][J][H][C][A]

Complete Series (7 Sets; 7 Diskettes); Backups.....$185.00
Network 3 Series (7 Sets; 7 Diskettes); Backups.....$555.00

"...requires students to think independently as they interact with the tutorial program..." **Booklist, May 1, 1984.**

Excellent programs that go beyond drill and practice. Randomly generated exercises for each concept. The student uses the screen as a worksheet, solving the equation step-by-step on the screen. After each step the equation is updated. Student moves at his or her own pace. All errors are immediately flagged and explained. Complete error analysis after each set of problems. Extremely well designed and implemented. Teacher's guide with each set.

EQUATIONS 1
1 TRS-80 Diskette, 32K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85
1 TRS-80 Cassette, 32K.....$25.95

"This is an excellent program...I recommend the purchase of this product." **School Microwave Review, Summer 1982.** *"...easily used by people with limited computer knowledge."* **Minn. Dept. of Education High Quality Courseware List.**

Equations are generated randomly in the form AX+B=C, where A, B, and C are integers. All solutions are integer values. All errors immediately flagged and explained.

EQUATIONS II
1 TRS-80 Diskette, 32K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85

Generates linear equations in the form AX+B=CX where A, B, C and D are integers. Helpful feedback throughout program.

SOLVING QUADRATIC EQUATIONS
1 TRS-80 Diskette, 32K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85
1 TRS-80 Cassette, 32K.....$25.95

"...simple and clear and will provide good reinforcement for students who need to develop skills in factoring quadratic equations. This is a program that does what it sets out to do." **Media Review, Feb 1983.**

Generates quadratic equations in the form AX2+BX+C=0 that are solvable by factoring. Detailed help given as needed.

BINOMIAL MULTIPLICATION
1 TRS-80 Diskette, 32K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85

"...excellent method of drill and practice..." **Minn. Dept. of Education High Quality Courseware List.**

Provides practice in multiplying two binomials, in the form (ax+b) (cx=d), where a, b, c, and d are integers. Tutorial help available as needed.

FACTORING ALGEBRAIC EXPRESSIONS
1 TRS-80 Diskette, 48K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85

"...format of this disk is one of the best I have seen." **Minn. Dept. of Education High Quality Courseware List.**

Algebraic linear and quadratic expressions that are factorable. Allows student to experiment. Help immediately available as needed.

SIMULTANEOUS LINEAR EQUATIONS
1 TRS-80 Diskette, 48K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85

"...impossible not to complete the solution, because the program provides help at every step." **Mathematics Teacher, April 1984.**

Generates random linear equations that are solvable by addition or subtraction. After completion of the equations, the program shows a graphic representation of the solution allowing student to see the connection between the algebraic and graphic solution.

GRAPHING LINEAR FUNCTIONS
1 TRS-80 Diskette, 48K; Backup.....$29.95
1 Network 3 TRS-80 Diskette; Backup.....$89.85

"...an excellent piece of educational software. With its low price, it is highly recommended for every secondary mathematics classroom..." **Mathematics Teacher, May 1984.**

Practice in graphing linear functions in the form AX+BY=C, (or some other variation of that form). Graphics enhance student understanding.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

APPLIED MATH
(Survival Math)

TRS-80 DISKETTE
or CASSETTE [J]

1 TRS-80 Diskette, 16K.....$55.00
1 Network 2/3 TRS-80 Diskette.....$165.00
1 TRS-80 Cassette, 16K.....$49.00

Recommended as Exemplary Science and Mathematics Software. **Classroom Computer News, March 1983.** *"...presents a wide variety of challenging problems in realistic contexts."* **Courseware Report Card, 1983.** *"At last, 4 creative, interesting and educationally sound math simulations!* **Midnite Software Gazette, Oct/Nov 1983. Included in Minnesota State Department of Education High Quality Courseware List, 1984.**

Simulations in applying math skills. Each simulation requires the use of math as a basis for making sound judgements. Teacher's guide. **Smart Shopper Marathon** - Student tries to figure the best shopping buys, using such aids as unit prices and percent discounts. **Hot Dog Stand** - Students run a hot dog stand at the school's football games. They purchase food and set prices on the basis of anticipated crowd size and weather conditions. **Travel Agent Contest** - Student plans a 7-day, 6-night trip without exceeding a prescribed spending limit. **Foreman's Assistant** - Student helps plan a playroom and buys materials for building. Covers such concepts as area, perimeter and units of measure.

ARITH-MAGIC SERIES

TRS-80 DISKETTE
or CASSETTE [P][I][J]

"All are motivational and different from most usual drills." **Creative Computing, April 1982.** *"...make learning math fun...a good math tutor and offers programs of different levels of difficulty that will entertain anyone who enjoys math..."* **Softwalk, Dec 1981.**

ARITH-MAGIC I
1 TRS-80 Diskette, 32K.....$35.00
1 Network 2/3 TRS-80 Diskette.....$70.00
1 TRS-80 Cassette, 16K.....$35.00

Game-like programs let kids have fun with basic mathematics and help them develop problem-solving skills. Includes: **Diffy** (subtraction practice); **Tripuz** (Addition/subtraction or multiplication/division); **Magic Squares** (averages and sequences). Problems gradually become more difficult and a tutorial mode makes sure that the student understands the theory behind the solutions. Teacher's guide. A quality Educational Design program.

ARITH-MAGIC II (Area Games)
1 TRS-80 Diskette, 32K.....$35.00
1 Network 2/3 TRS-80 Diskette.....$70.00

Consists of three games, two help programs and two explorations of the mathematical questions which arise in the games. Game titles are: Squ/area Game, Rectangle Game and Per/area Game. Like Arith-Magic I, the diskette is self-contained and does not require any outside knowledge except familiarity with addition and multiplication. For grades 3 and up. Teacher's guide. A quality Educational Design program.

BASIC ARITHMETIC

TRS-80 DISKETTE [P][I]

1 TRS-80 Diskette, 48K; Backup.....$44.00

Provides practice in arithmetic skills. Designed for use at the elementary level but can also provide remedial work for older students. While guiding a spaceship through a hazardous galaxy, students using **Base Ten** can practice the multiplication of multiples of ten, decimals, or whole numbers from zero to nine. **Math Game** provides whole number exercises in all four arithmetic operations and keeps score for up to 35 players. In **Speed Drill**, students use whole numbers in working with all four arithmetic operations and teachers can set time limits on the presentation of problems. **Estimation** involves rounding whole numbers and using rounded numbers to estimate answers to arithmetic exercises. Teacher's guide contains worksheets.

BASIC MATH COMPETENCY

TRS-80 DISKETTE [H]

4 TRS-80 Diskettes, 48K; Backup.....$199.00

Instructional program with record keeping based on New York State curriculum for competency in mathematics. Four disks with rcord keeping to diagnose deficiencies and to monitor progress. Fourteen drill programs and worksheet generator. Runs on networks II and III. Requires two disk drives. Teacher's guide.

BASIC MATH FACTS DRILL

TRS-80 DISKETTE [P][I]

1 TRS-80 Diskette, 48K.....$59.95

Provides drill and practice on all basic addition, subtraction, multiplication, and division facts with a football game activity at the end of each lesson. 20 exercises in each lesson. Easy-to-understand, on-screen directions. Randomly selected exercises. Immediate correction and feedback. At the end of each lesson, items that were missed are displayed, and the student is given an opportunity to copy the problems for study and review. Scoring appears on-screen at the end of each lesson. Automatically keeps track of facts not mastered and presents the next lesson. Comprehensive Teacher's Manual.

BASIC MATH "FLASH" FACTS

TRS-80 DISKETTE [P][I]

1 TRS-80 Diskette, 48K.....$59.95

Students learn the basic math facts in addition, subtraction, multiplication, and division, through the appeal of flash card techniques plus the excitement of timed responses and a running display of results. Individualized practice, with each student working at an appropriate level and pace. Each lesson has 15 problems with an option for 15 additional problems. Randomly generated exercises. Teacher can control lesson content by selecting specific basic facts or combinations of facts. Comprehensive teacher's guide.

BASIC MATH MASTERY

TRS-80 DISKETTE
or CASSETTE [I][J]

These are very well designed programs for practicing and mastering basic math operations. All problems are generated randomly. Different problems are presented each time a program is run. The computer screen simulates the work being done on paper, so no pencil and paper is needed. A cursor points to each position as an entry is needed. Student can follow the procedure easily. When an error is made, it is immediately flagged. Students may then enter another number or, when helpful, an explanation is shown on the screen. This way the student always knows exactly where s/he is and exactly where the error occurred. If a second error is made on a problem, the answer is shown, and the procedure continues. Teacher's guide.

ADDITION WITH CARRY - Problems may be chosen with 1-9 addends from 1-9 columns wide.
SUBTRACTION PRACTICE - Student select problems with or without "borrowing".
1-2-3 DIGIT MULTIPLICATION - Student multiplies 3 digit number by a 1, 2, or 3 digit number.
LONG DIVISION - Choose either a 1, 2, or 3 digit divisor.

(Each title, 1 TRS-80 Diskette, 48K; Backup.....$24.95)
(Each title, 1 Network 2 TRS-80 Diskette; Backup$74.85)
(Each title, 1 Network 3 TRS-80 Diskette; Backup$74.85)
(Each title, 1 TRS-80 Cassette, 16K.....$20.95)

CONSUMER MATH

TRS-80 DISKETTE [J]

1 TRS-80 Diskette, 32K.....$35.00
1 Network 2/3 TRS-80 Diskette.....$35.00

Calculations relating to earning and purchasing. Includes: calculating weekly or yearly earnings; calculating overtime and holiday rates of pay; calculating the price per ounce; choosing the best buy.

DECIMAL OPERATIONS

TRS-80 DISKETTE [I][J]

Complete Series (4 Sets; 4 Diskettes); Backups.....$90.00
Network 3 Series (4 Sets; 4 Diskettes); Backups.....$270.00

"...very complete and useful tool that provides practice in basic operations with decimal numbers with careful attention to process." **Media Review, Feb 1984.**

A well-designed series in which the student is guided in step-by-step progression. Options are given as to number of problems and size of numbers. Students learn and use correct vertical placement of the problems using the computer screen as a worksheet. All errors are immediately flagged, and an error analysis is given after each problem and at the end of each set. Teacher's guide with each set.

ADDINGING DECIMALS
SUBTRACTING DECIMALS
MULTIPLYING DECIMALS
DIVIDING DECIMALS

(Each title, 1 TRS-80 Diskette, 32K; Backup.....$24.95)
(Each title, 1 Network 3 Diskette, Backup.....$74.85)

ELEMENTARY MATH SERIES

TRS-80 DISKETTE
or CASSETTE [I][J]

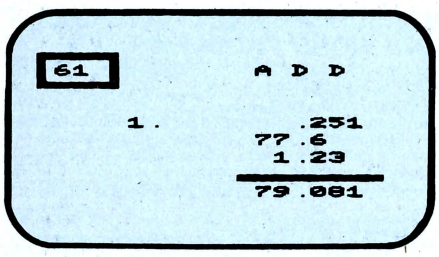
Complete Series (2 Sets, 2 Diskettes); Backup.....$95.00
Network 2/3 Series (2 Sets; 2 Diskettes); Backup....$190.00
Complete Series (2 Sets; 2 Cassettes); Backup.....$95.00

ELEMENTARY MATH 1
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00

Includes: **Place Value** - basic concepts; **Number Strings** - addition practice; **Math Drill** - all operations, user specifies type and number of problems; and **Speed Math Drill** - same as Math Drill, but with ten levels of speed.

ELEMENTARY MATH 2
1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette.....$100.00
1 TRS-80 Cassette, 16K; Backup.....$50.00

Includes: **Decimals** - basic concepts and drills; **Fractions** - introduction and drill; **Bagels** - student tries to guess 3-digit number; **Stones** - number games; and **Factor** - student learns factors of numbers.



ESSENTIAL MATHEMATICS SERIES

TRS-80 DISKETTE P I J

Provides drill and practice on essential mathematical skills. Not a complete mathematics curriculum, the program is designed to enable the user to review and master the essential mathematical skills necessary for more advanced work. **Features:** Highly motivational drill and practice with immediate reinforcement; Carefully graded sequence of skills; Extra activities at the end of many of the lessons; Teacher options for changing the length of lessons; Simple record keeping system; Early exit from the lesson if necessary. Teacher's guide with each set. A Micro School Program from Bertamax, Inc.

ESSENTIAL MATHEMATICS, Grade 1 and 2: Operations Series
Complete Series (2 Sets, 2 Diskettes).....$79.90
Network 2/3 Series (2 Sets, 2 Diskettes).....$159.80

Essential Mathematics, Grade 1: Operations
1 TRS-80 Diskette, 32K.....$39.95
1 Network 2/3 TRS-80 Diskette.....$79.90

Essential Mathematics, Grade 2: Operations
1 TRS-80 Diskette, 32K.....$39.95
1 Network 2/3 TRS-80 Diskette.....$79.90

ESSENTIAL MATHEMATICS, Grade 3-6: Operations Series
Complete Series (4 Sets, 8 Diskettes).....$295.80
Network 2/3 Series (4 Sets, 8 Diskettes).....$591.60

Essential mathematics, Grade 3: Operations
2 TRS-80 Diskettes, 32K.....$65.95
2 Network 2/3 TRS-80 Diskettes.....$131.90

Essential Mathematics, Grade 4: Operations
2 TRS-80 Diskettes, 32K.....$69.95
2 Network 2/3 TRS-80 Diskettes.....$139.90

Essential Mathematics, Grade 5: Operations
2 TRS-80 Diskettes, 32K.....$79.95
2 Network 2/3 TRS-80 Diskettes.....$159.90

Essential Mathematics, Grade 6: Operations
2 TRS-80 Diskettes, 32K.....$79.95
2 Network 2/3 TRS-80 Diskettes.....$159.90

ESSENTIAL MATHEMATICS, Grade 3-6: Fractions
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 4-6: Decimals and Percent
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 3-6: Number Concepts
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 6-8: Fractions
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 6-8: Decimals and Percent
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 6-8: Number Concepts
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grade 6-8: Pre-Algebra
1 TRS-80 Diskette, 32K.....$59.95
1 Network 2/3 TRS-80 Diskette.....$119.90

ESSENTIAL MATHEMATICS, Grades 6-8: Review
6 TRS-80 Diskette, 32K.....$225.00
6 Network 2/3 TRS-80 Diskette.....$450.00

ESTIMATION SKILL BUILDER

TRS-80 DISKETTE
or CASSETTE I J H

1 TRS-80 Diskette, 32K.....$34.95
1 Network 2/3 TRS-80 Diskette.....$69.95
1 TRS-80 Cassette, 16K.....$34.95

"...useful for both practice and enrichment...good program to have in an arithmetic software library." **Computing Teacher, Oct 1981.**

Combines arcade game fun with development of quick and accurate estimation skills. Addition, subtraction, multiplication, and division problems appear briefly on the screen. Player must quickly estimate answer. No time for pencil and paper if you're going to hit the target! One or two players. Teacher's notes.

FACTS ARCADE GAMES

TRS-80 DISKETTE P I

Uses exciting arcade games to provide drill on basic number facts and includes a student management system as well. Each game has a choice of difficulty levels, five speed levels, and length of playing time (1 to 10 minutes). Points are scored for correct answers, with bonus points for completing a round with no mistakes. Points are lost for incorrect answers or giving no answer. Final scores are shown on the screen at the end of the game. Colorful, animated graphics throughout. Teacher's guide.

ADDITION CIRCUS
1 TRS-80 Diskette.....$39.95
1 TRS-80 Diskette; Backup.....$54.95
Balloons containing addition fact problems float upward in the sky. A correct answer allows the clown to pop a balloon before it hits the circus tent.

SUBTRACTION DEFENDERS
1 TRS-80 Diskette.....$39.95
1 TRS-80 Diskette; Backup.....$54.95
Cannonballs containing subtraction fact problems fly toward the castle wall. Students defend the castle by typing correct answers to shoot down the cannonballs.

MULTIPLICATION BRIGADE
1 TRS-80 Diskette.....$39.95
1 TRS-80 Diskette; Backup.....$54.95
Multiplication problems appear in the windows of the burning building. Answering the problems correctly helps the bucket brigade put out the fire.

DIVISION SHOOTING GALLERY
1 TRS-80 Diskette.....$39.95
1 TRS-80 Diskette; Backup.....$54.95
Ducks containing division fact problems move across the screen in a shooting gallery format. Correct answers allow the student to shoot down the ducks.

FRACTIONS OPERATIONS

TRS-80 DISKETTE
or CASSETTE I J

Complete Series (4 Sets; 4 Diskettes); Backups.....$90.00
Network 2 Series (4 Sets; 4 Diskettes); Backups.....$270.00
Network 3 Series (4 Sets; 4 Diskettes); Backups.....$270.00
Complete Series (4 Sets; 4 Cassettes).....$80.00
Well designed programs. All work done on the screen. Exercises are randomly generated and all errors are immediately flagged and explained. Use of split screen provides work space and simultaneous instructions and/or error messages for optimum feedback. Teacher's guide.

ADDING FRACTIONS
1 TRS-80 Diskette, 48K; Backup.....$24.95
1 Network 2 TRS-80 Diskette; Backup.....$74.85
1 Network 3 TRS-80 Diskette; Backup.....$74.85
1 TRS-80 Cassette, 32K.....$20.95
"...a useful addition to a software collection." **Mathematics Teacher, March 1983.**

Excellent practice in adding fractions with uncommon denominators. The screen is divided into two segments, the top for the work area and the bottom for messages and instructions. The problem then evolves from left to right. The student is given the option of changing denominators or adding.

SUBTRACTING MIXED FRACTIONS
1 TRS-80 Diskette, 48K; Backup.....$24.95
1 Network 2 TRS-80 Diskette; Backup.....$74.85
1 Network 3 TRS-80 Diskette; Backup.....$74.85
1 TRS-80 Cassette, 32K.....$20.95
"...excellent and quick to the point...excellent treatment of the lowest common denominator." **Microsift, April 1984.**

Problems are composed of positive mixed fractions less than 10. Screen is divided into two segments, as in Adding Fractions. Student is given the option of finding the least common denominator, borrowing from the whole number part, subtracting or reducing. Student must enter the lcd, change the fractions to those having common denominators, borrow, (if necessary), subtract and reduce (if necessary).

MULTIPLYING FRACTIONS
1 TRS-80 Diskette, 48K; Backup.....$24.95
1 Network 2 TRS-80 Diskette; Backup.....$74.85
1 Network 3 TRS-80 Diskette; Backup.....$74.85
1 TRS-80 Cassette, 32K.....$20.95
"The consistency and simplicity with which this program operates makes it a valuable resource to support a middle school or junior high school mathematics program." **Media Review, Feb 1983.**

Practice in multiplying fractions and in cancelling or reducing. This superb teaching method focuses on errors as they are made in a complex algorithm. The student cannot continue until each step is correct.

DIVIDING FRACTIONS
1 TRS-80 Diskette, 48K; Backup.....$24.95
1 Network 2 TRS-80 Diskette; Backup.....$74.85
1 Network 3 TRS-80 Diskette; Backup.....$74.85
1 TRS-80 Cassette, 32K.....$20.95
Practice in dividing fractions. Once the student has made the option to convert into a multiplication problem by changing the divisor to its inverse, the program is exactly the same as Multiplying Fractions.

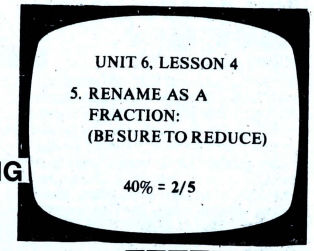
GALAXY MATH FACTS GAME

TRS-80 DISKETTE P I J

7 TRS-80 Diskettes, 48K.....$174.00
"...many students don't realize they are drilling on math skills but think of the program as a game. Recommended." **Booklist, June 1, 1983.**

Your students excape the perils of the Star Field, Black Hole, and Klingons by answering math-fact questions correctly. The player's ship and crew are on the other side of the galaxy. The objective is to get back to earth without being destroyed by the Star Field, the Black Hole, or the Klingons. To overcome the obstacles they encounter, students must accumulate energy and ammunition by correctly responding to basic math-fact questions. Students try to complete the game, or return to earth, in as short a time as possible. The added challenge of avoiding danger in the space trip provides exciting motivation for performing well. Automatically lowers to an easier level if a student experiences difficulty. Problem-solving strategies are developed as game decisions are made. Comprehensive teacher's guide.

Six basic math programs:
Galaxy Math Whole Number Operations
Galaxy Math Place Value
Galaxy Math Fractions (2 diskettes)
Galaxy Math Decimals/Percents
Galaxy Math Integers
Galaxy Math Estimating/Rounding
(Each title, 1 TRS-80 Diskette, 48K.....$32.95)
Except: Galaxy Math Fractions, 2 Diskettes....$32.95



GATHERING SPEED SERIES

TRS-80 DISKETTE J

GATHERING SPEED, Set 1
1 TRS-80 Diskette, 32K (5 programs).....$169.00
1 Network 2/3 TRS-80 Diskette (5 programs).....$169.00
Mathematical operations not found in standard drill programs.

Powers and Roots - Raising to a power, raising to a power and multiplying, raising to a power and adding or subtraacting, and finding square roots from perfect squares.

Perimeters, Areas, and Volumes - Perimeters of rectangles and squares. Circumference of circles. Areas of rectangles, squares, parallelograms, triangles, and circles. Volumes of rectangular prisms, cubes, and cylinders. Graphic illustrations.

Factoring: Three Lessons - Finding any two factors, finding prime factors, finding prime factors using exponential notation.

Average - Finding the average of numbers in a set, given only the set of numbers; and solving word problems involving finding the average of a series of numbers.

Ratio and Proportion: Five Lessons - Writing a ratio as a fraction, word problems converting ratios to fractions, find the missing number in a proportion, finding the missing number using larger proportions, and word problems requiring the student to write and solve a proportion.
(Each title, 1 TRS-80 Diskette, 32K.....$35.00)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$35.00)

GATHERING SPEED, Set 2
1 TRS-80 Diskette, 32K (5 programs).....$169.00
1 Network 2/3 TRS-80 Diskette (5 programs).....$169.00
"...valuable practice in mathematical topics that relate to real-life needs...good reinforcement in the mathematics of money handling...bare bones drill program...deals with junior high subjects that are not often give CAI treatment." **Courseware Report Card 1983.**

Mathematical operations not found in standard drill programs.

Equivalents: Six Lessons - Conversion among fractions, decimals, and percents: rename fractions to decimals, decimals to fractions, percents to decimals, percents to fractions, decimals to percents, and fractions to percents.

Percents: Nine Lessons - Finding a percent of a number. Finding what percent one number is of another. Mixed problems and word problems.

Interest: Three Lessons - Finding the interest using the formula i=prt: where rate and time are whole numbers; rate is fractional, time is a whole number; rate is a whole number, time is fractional.

Discount, Sales Tax, Commission, and Installment Buying - Consumer math including: rounding to nearest cent; finding a percent and rounding to the nearest cent; calculating price of item including sales tax, amount of discount and sale price, amount of commission and total earnings, and installment buying costs.

Word Problems: Six Lessons - Word problems: dealing with whole numbers, fractions, and decimals. To accustom your students to working with word problems.
(Each title, 1 TRS-80 Diskette, 32K.....$35.00)
(Each title, 1 Network 2/3 TRS-80 Diskette.....35.00)

GRAPHING CAN BE FUN

TRS-80 DISKETTE
or CASSETTE
I

2 TRS-80 Diskettes, 48K.....$55.00
2 Network 2 TRS-80 Diskettes.....$55.00
2 Network 3 TRS-80 Diskettes.....$55.00
2 TRS-80 Cassettes, 16K.....$55.00

Simplified instruction on the purpose of graphs, their interpretation, and construction. Graphs become understandable and fun as they visually come to life via the microcomputer. Reproducible student skill pages are included in the teacher's guide.

Pie and Line Graphs
Bar and Picture Graphs

(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each Title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

GRAPHS, READING AND INTERPRETING

TRS-80 DISKETTE
I

1 TRS-80 Diskette, 48K.....$35.00
1 Network 3 TRS-80 Diskette.....$35.00

Reading and interpreting information from graphs. Includes: pictographs, circle graphs, bar graphs, and line graphs. Guide.

HIGH SCHOOL MATH COMPETENCY

TRS-80 DISKETTE
H

1 TRS-80 Diskette, 32K; Backup.....$99.00
1 Network 2 TRS-80 Diskette; Backup.....$198.00
1 Network 3 TRS-80 Diskette; Backup.....$198.00

For drill and remediation in the basic skills of mathematics. The program content is based on the New York State curriculum guidelines for competency in mathematics. Contents: Whole Numbers, Fractions, Decimals, Basic Percent, Primes and Factors, Integers, Algebra, Geometry, Ratio and Proportion, Probability, Statistics, Percent Word Problems, Money Problems and Miscellaneous Problems. Teacher's guide.

INTEGERS/INTEGER FAST FACTS

TRS-80 DISKETTE
or CASSETTE
I J H

1 TRS-80 Diskette, 32K.....$34.95
1 Network 2/3 TRS-80 Diskette.....$69.95
1 TRS-80 Cassette, 16K.....$34.95

"...a worthwhile drill package." **Courseware Report Card, Sept 1982.**

Integers - Teaches the four basic operations with positive and negative numbers. Great for students first learning to work with signed numbers. The computer randomly generates problems and gives stuents prompts and rules for solving the problems. The program tracks mistakes and provides feedback to encourage improvement. **Integer Fast Facts** - provides timed practice on integer operations in a highly motivating arcade game format.

MATH FOR ALL AGES SERIES

TRS-80 DISKETTE
P I J

Complete Series (4 Sets; 16 Diskettes).....$450.00
Network 2 Series (4 Sets; 16 Diskettes).....$450.00
Network 3 Series (4 Sets; 16 Diskettes).....$450.00

A sequential, curriculum based mathematics program. Includes addition, subtraction, multiplication and division. Skills developed in the program include simple problems using pcitures for easy understanding, speed drills for mastering basic facts, and complex problems involving multiple digits and regrouping. Comprehensive teacher's guide contains reproducible testing materials. A student management system is included on each disk.

MATH FOR ALL AGES: ADDITION
4 TRS-80 Diskettes, 32K.....$115.00
4 Network 2 TRS-80 Diskettes.....$115.00
4 Network 3 TRS-80 Diskettes.....$115.00

MATH FOR ALL AGES: SUBTRACTION
4 TRS-80 Diskettes, 32K.....$115.00
4 Network 2 TRS-80 Diskettes.....$115.00
4 Network 3 TRS-80 Diskettes.....$115.00

MATH FOR ALL AGES: MULTIPLICATION
4 TRS-80 Diskettes, 32K.....$115.00
4 Network 2 TRS-80 Diskettes.....$115.00
4 Network 3 TRS-80 Diskettes.....$115.00

MATH FOR ALL AGES: DIVISION
4 TRS-80 Diskettes, 32K.....$115.00
4 Network 2 TRS-80 Diskettes.....$115.00
4 Network 3 TRS-80 Diskettes.....$115.00

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

MATH FACTS GAMES SERIES

TRS-80 DISKETTE
I J

MATH FACTS GAMES I
1 TRS-80 Diskette, 32K.....$34.95
1 Network 2/3 TRS-80 Diskette.....$69.90

To provide highly motivating practice on the 400 basic math facts in addition, subtraction, multiplication and division. The user may choose any operation or combination of operations at any one of four levels of difficulty. In Math Facts Games I the user plays against the computer. Contents: Count Down; Secret Word; Tic-Tac-Toe; The Great Computer Challenge. Teacher's guide. A Micro Schol Program from Bertamax, Inc.

MATH FACTS GAMES II
1 TRS-80 Diskette, 32K.....$34.95
1 Network 2/3 TRS-80 Diskette.....$69.90

Fast action math fun. User plays against the computer or against another player. Two player games. Contents: Stop the Fact; Guide the Answer; Find the Answer; The Great Fact Race. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH MASTERY GRADES 1-8

TRS-80 DISKETTE
P I J

Combines guided math drill, an arcade-style reward game, and a student management system. Each disk offers a choice of carefully selected difficulty levels from beginning to advanced. The computer leads students through the problems step by step checking each response in sequence. After three errors, it displays the proper response. At the end of each set of problems, the program places students at a higher difficulty level, the same level, or a lower level based on the percent correct. Problems presented per level is preset at 10 but may be changed by the teacher to any number from 1 to 50. Students are rewarded for good performance with a chance to play an arcade-style game. Student management records up to 200 student files. Teacher may choose to view, print, or delete all student files or only those of an individual student. Teacher's guide.

ADDITION AND SUBTRACTION MASTERY
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

MULTIPLICATION AND LONG DIVISION MASTERY
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

DECIMALS: ADDITION AND SUBTRACTION MASTERY
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

DECIMALS: MULTIPLICATION AND DIVISION MASTERY
1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

MATH ON COMPUTERS

TRS-80 DISKETTE
or CASSETTE
I J

Clear, well-organized, interactive instruction in math concepts and operations. More than just drill and explanation. Each lesson begins with instruction. A special feature then allows students to give sample problems to the computer to work. Student observes. Student then does his own problems, randomly presented by the computer. Great flexibility in numbers of problems. Includes branching. Immediate "friendly" feedback. Each concept taught is then enhanced by a game or an interesting activity. Content, use of graphics, type of reinforcement and feedback all very high quality. Addition of thought-provoking games and activites an extra bonus. Teacher's guide. A Quality Educational Designs Program.

FACTORING WHOLE NUMBERS
3 TRS-80 Diskettes, 32K.....$90.00
3 Network 2/3 TRS-80 Diskettes.....$225.00
6 TRS-80 Cassettes, 16K.....$90.00

"Definitely a cut above the usual drill and practice...highly interactive programs." **Computing Teacher, Jan 1981.**

Tutorial Program: Factor Pairs, Pairs and Squares, Primes and Composites, Exponents, Highest Common Factor, Least Common Multiple. **Game/Exploration Programs:** Rectangle Game, Guess and Test, Sieve of Eratosthenes, How Many Factors?; Euclid Game, Factoring Finale.

MATH ON COMPUTERS: FRACTIONS
6 TRS-80 Diskettes, 32K.....$175.00
6 Network 2/3 TRS-80 Diskettes.....$437.50
12 TRS-80 Cassettes, 16K.....$175.00

"These programs split the learning process into manageable bites..." **Computing Teacher, Jan 1982.** *"This is a remarkable set of programs..."* **C.U.E. Newsletter.**

Tutorial Programs: Concepts, Equivalent Fractions, Division Meaning, Fractions and Measurement, Multiplying Fractions, Multiplication Shortcuts, Adding Fractions, Comparing Fractions; Mixed Numbers, Division the Safe Way, Division and Inverses, Compound Fractions. **Game/Exploration Programs:** Placement Test, Frac Tac Toe, Decimal Patterns, Curious Measurements, Target, Factor Fracture, Arrow Problem, Farey Sequences, Fracjack, Divide and Conquer, Take a Walk, Continued Fractions.

MEASUREMENTS: CONVERSIONS AND WORD PROBLEMS

TRS-80 DISKETTE
I J

1 TRS-80 Diskette, 32K.....$35.00
1 Network 3 TRS-80 Diskette.....$35.00

Conversions and word problems for each area. Length: inches, feet, years, miles. Weight: ounces, pounds, tons. Liquid measure: fluid ounces, pints, quarts, gallons. Time: seconds, minutes, hours, days, weeks, months, years. Each problem requires conversion from one unit to another. Guide.

MONEY SKILLS

TRS-80 DISKETTE
P I

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides highly interactive drill in money skills, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program. Four lessons include Pennies, Nickels, Dimes, Quarters, Half-dollars and Dollars. Four levels: Count Money, Can You Buy?, Select Fewest Coins, How Much Change? Management system. Teacher's guide.

NUMBER CRUNCHER

TRS-80 DISKETTE
I J

1 TRS-80 Diskette, 32K.....$49.95
1 Network 2/3 TRS-80 Diskette.....$99.90

A different activity that encourages reasoning and logical thinking. Based on the "function machine" idea. Student inserts a number. The "machine" accepts the number and processes it. Out pops a new number. The same is done for 3 numbers, then the student has the opportunity to guess the function that has been performed on each number to get the answer. (Example 2N plus 3). For students who want a challenge in math. A Micro School Program from Bertamax, Inc.

NUMBER FACTS

TRS-80 DISKETTE
P I J

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Highly interactive drill in number facts, motivates students with an arcade-style reward game and includes a management system. Four lessons: Addition; Subtraction; Multiplication; and Division Facts. Problems are randomly generated. At the end of each set of questions, students are automatically placed at a higher level, lower level, or the same level depending on their scores. Teacher's guide.

NUMBER FACT SHEETS

TRS-80 DISKETTE
A

1 TRS-80 Diskette, 48K.....$29.95
1 TRS-80 Diskette, 48K; Backup.....$44.95

A teacher resource disk which randomly generates worksheets, and corresponding answer keys, containing 2 to 40 number facts. The user first selects from these operations: addition, subtraction, addition and subtraction, multiplication, division, and multiplication and division. The user then selects the parameters from which the problems are generated. User's guide.

ORDER OF OPERATIONS PRACTICE

TRS-80 DISKETTE
I J H

1 TRS-80 Diskette, 48K; Backup.....$29.95

Provides practice in order of operations with addition, subtraction, multiplication, division and parenthesis. Option of working with either whole numbers or signed numbers is given. All numbers and operations in the expression are generated randomly and all results are integers. Each expression contains three operations and one set of parenthesis. A typical example would be 3*(8 - 2)/6. The student simplifies the expression one step at a time on the screen. All errors are immediately flagged and explained. When the problem has been completed, a summary of the steps in the solution is shown on the screen. Teacher's guide.

PLOT/GUESS THE RULE

TRS-80 DISKETTE
or CASSETTE
J H

1 TRS-80 Diskette, 32K.....$39.95
1 Network 2/3 TRS-80 Diskette.....$69.95
1 TRS-80 Cassette, 16K.....$39.95

"...a very exciting program which should be in every algebra, analytic geometry and calculus classroom." **Computing Teacher.**

Plot - Utilizes the power of the computer to graph any function you can create. **Guess the Rule** - In arcade format, encourages students to guess the computer's secret equation. Develops concepts of functions, ordered pairs and truth tables. Teacher's notes.

PROBABILITY THROUGH PROBLEM SOLVING

TRS-80 DISKETTE J H

2 TRS-80 Diskettes, 32K.....$39.95

Probability tutorial uses games and examples to graphically and interactively teach probability concepts. Includes self test. Guide.

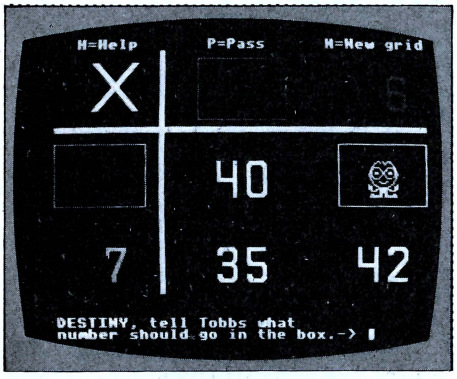
PROBLEM SOLVING IN MATH SERIES

TRS-80 DISKETTE I

Helps students learn a variety of skills to aid in solving math problems such as reading carefully and paying attention to details, looking for clues everywhere, learning clue words for mathematical operations, identifying the goal, and using systematic trial and error strategy. Teacher's guide. A Micro School Program from Bertamax, Inc.

PROBLEM SOLVING IN MATH, Grade 3
3 TRS-80 Diskettes, 32K.....$169.95
3 Network 2/3 TRS-80 Diskettes.....$339.90

PROBLEM SOLVING IN MATH, Grade 4
3 TRS-80 Diskettes, 32K.....$169.95
3 Network 2/3 TRS-80 Diskettes.....$339.90



PUZZLES AND PROBLEM SOLVING

(Teasers by Tobbs)

TRS-80 DISKETTE or CASSETTE I J

1 TRS-80 Diskette, 32K; Backup.....$55.00
1 TRS-80 Cassette, 16K.....$49.00

Learning Software Computer Award, **Jan 1984.** *"...fine motivation for review, extra practice, or enrichment." Recommended.* **Booklist, Sept 1, 1983.** *Listed as Exemplary Science and Mathematics Software,* **Classroom Computer News, March 1983.**

Tobbs shows the way in two challenging programs designed to help students think logically to solve addition and multiplication problems. In both programs, a grid and a character called Tobbs appear on the screen. The grid presents a succession of math problems, each with a missing number. Students use logic to decide which number can't be, might be or must be the number that solves the problem on the grid. Both programs offer six levels of difficulty. Teacher's guide.

PUZZLES AND PROBLEM SOLVING: ALGEBRA

(Tobbs Learns Algebra)

TRS-80 DISKETTE I J H

1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette.....$165.00

"...what educational courseware ought to be:...stimulate thinking and encourage students to reason answers to problems." **InfoWorld, Vol. 5, No. 48.**

An extension of the "Teasers by Tobbs" program. Develops students' algebraic thinking, hypothesis-making and testing ability and problem-solving skills. Varying skill levels. Beginning levels of the puzzles acquaint students with algebraic expressions. Higher levels use the same expressions but require students to work backwards to solve the problems. Students then proceed to special puzzle options that require they figure out the appropriate algebraic formula after choosing numbers to be used. Teacher's guide.

ROUNDING

TRS-80 DISKETTE I J

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides highly interactive guided drill in rounding whole numbers and decimals, gives teachers control over several aspects of the programs and includes a student management system. Students may choose from six lessons on whole numbers and four lessons on decimals. Numbers are randomly generated and students control the pace of presentation. Immediate reinforcement. If student scores a certain percentage, which may be adjusted by the teacher, they may choose to play a challenging arcade-style game. Teacher's guide.

SEMCALC: THE WORD PROBLEM SOLVER

TRS-80 DISKETTE I J H

1 TRS-80 Diskette, 32K; Backup.....$95.00
1 Network 3 TRS-80 Diskette.....$285.00

Noted as Exemplary Math/Science Courseware in **Classroom Computer News, March 1983.** *Listed as Notable Software—1982-83 in* **Electronic Learning.**

Helps students solve word problems by focusing on the units rather than the numbers. Help students avoid inappropriate calculations by (1) stopping them from processing incompatible units; (2) helping them convert to common units; (3) leading them through the steps of making conversions between related units; (4) using "unit awareness" to help students determine the correct operation. Helps students decide which operation to use for a problem. Keeps notes on the processes that go into each computation; thus the student can see how an answer was reached and whether or not the units involved were renamed or converted. Users can also add their own notes for future reference, or can request help from a built-in tutorial. Teacher's guide.

SOLVING WORD PROBLEMS SERIES

TRS-80 DISKETTE or CASSETTE I

Complete Series (2 Sets, 2 Diskettes).....$55.00
Network 2 Series (2 Sets, 2 Diskettes).....$55.00
Network 3 Series (2 Sets, 2 Diskettes).....$55.00
Complete Series (2 Sets, 2 Cassettes).....$55.00

Story problems are presented with several different questions about each problem. Helps student to recognize and find several kinds of information within story problems. Teacher's guide with reproducible worksheets included.

SOLVING WORD PROBLEMS 1
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2 TRS-80 Diskette.....$29.95
1 Network 3 TRS-80 Diskette.....$29.95
1 TRS-80 Cassette.....$29.95

3rd, 4th, and 5th grade reading level.

SOLVING WORD PROBLEMS 2
1 TRS-80 Diskette, 48K.....$29.95
1 Network 2 TRS-80 Diskette.....$29.95
1 Network 3 TRS-80 Diskette.....$29.95
1 TRS-80 Cassette.....$29.95

6th and 7th grade reading level.

SUPERMATH

TRS-80 DISKETTE or CASSETTE I J H

1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette.....$165.00
2 TRS-80 Cassette, 16K.....$49.00

Math games and puzzles help your gifted students explore such concepts as magic squares, math codes and binary numbers. Varying levels of difficulty make this set of programs excellent for getting students of all ages "hooked" on math. Teacher's guide.

TARGETS: A NUMBER GAME

TRS-80 DISKETTE I J H

1 TRS-80 Diskette, 48K; Backup; Worksheets.....$55.00
1 Network 3 TRS-80 Diskette; Backup; Wksh.....$165.00

Exciting game combines practice in basic mathematical operations with a logical approach to problem solving. The game consists of (1) pair of numbers from 0-9, (2) the operation(s) to be used with the numbers and (3) a target number from 0-100. Students must combine these numbers with the operation(s) to arrive at the designated target. Students learn to recognize where to begin to work within the constraints of a problem and to analyze the most efficient solution to a problem. Teacher's guide with reproducible worksheets.

TELLING TIME

TRS-80 DISKETTE P

1 TRS-80 Diskette, 48K.....$39.95

Combines guided drill in telling time, an arcade-style reward game, and student management. Choice of four lessons: (1) type digital time when shown clock face, (2) type digital time when given time in words, (3) set clock hands when given digital time, and (4) set clock hands when given time in words. Includes: hours, half-hours, quarter-hours and 5 minutes. Teacher's guide.

TELLING TIME SERIES

TRS-80 DISKETTE E P

1 TRS-80 Diskette, 32K.....$39.95
1 Network 2/3 TRS-80 Diskette.....$79.90

No typing skills required. Highly motivating. Excellent training program for telling time to the hour, half-hour, and quarter-hour. Teacher's guide. A Micro School Program from Bertamax, Inc.

WHATSIT CORPORATION: SURVIVAL MATH SKILLS

TRS-80 DISKETTE J H

1 TRS-80 Diskette, 48K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette; Backup.....$165.00

Real-life simulation of starting and running The Whatsit Corporation. Working together in small or classroom-size groups, students make decisions about general start-up. Then they move on to operating decisions -- size of sales force, amount of inventory, repayment of loans, price setting, advertising costs, record keeping, need for new capital and even unexpected business hassles such as late shipments and supply shortages. Competition between groups increases the challenge. Helps students use mathematics as an analytical tool in weighing variables, planning strategies and evaluating results in a real-life context. Teacher's guide with worksheets, answer key, masters for overhead transparencies and student activities.

TWO-STEP WORD PROBLEMS

TRS-80 DISKETTE I

1 TRS-80 Diskette, 32K.....$35.00
1 Network 2/3 TRS-80 Diskette.....$35.00

Word problems involving two steps, using additon, subtrction, multiplication, and division. Some decimals and fractions are included. Guide.

SCIENCE

BIOLOGY SOFTWARE

TRS-80 DISKETTE J H

Increases students' mastery of important Biology concepts by providing an interactive format that stimulates creative thinking, problem-solving and factual recall. Reviews and reinforces study of enzymes, photosynthesis and DNA. Includes short-answer questions requiring student-supplied words, numbers of sequences, multiple choice questions, discovery of error, lab simulations and models of processes. Answering the questions requires factual knowledge, problem solving, and ability to collect data and interpret it with the use of graphs. The subject matter of each program assumes that the student has been exposed to the topic in a first-year biology course. Incorrect answers elicit extra help. The computer's random function maximizes the variety of ways in which questions are posed. Thus, repeated runs of the program are instructive and reinforcing rather than boring and repetive. Student summary provided at end of each part. Teacher's guide with each set.

DNA: THE GENETIC CODE
1 TRS-80 Diskette, 32K; Backup.....$119.00

Includes: DNA: Structure and Replication and DNA: Mechanism of Protein Synthesis.

PHOTOSYNTHESIS
1 TRS-80 Diskette, 32K; Backup.....$119.00

Includes: The Light Reaction and The Dark Reaction.

ENZYMES
1 TRS-80 Diskette, 32K; Backup.....$119.00

Includes: Structure and Function and The Effects of Temperature on Enzyme Activity: A Laboratory Simulation.

COMPETE: PLANT COMPETITION

TRS-80 DISKETTE H C

1 TRS-80 Diskette, 48K; Student Guide.....$45.00

Enables students to plan and carry out investigations of interactions between flowering plants without the long delay usually associated with growth experiments. The unit includes investigations with both real and simulated plants. Includes student's guide and teacher's guide.

DISCOVERING THE SCIENTIFIC METHOD

(Snigs...Flirks...Blorgs)

TRS-80 DISKETTE J

1 TRS-80 Diskette, 16K; Backup.....$49.00
1 Network 3 TRS-80 Diskette.....$147.00

Don't just teach the scientific method...let your students practice it! This program will help your students to understand what a hypothesis is, how to analyze thier observations, how to organize their data into simple categories and record the results of "experiments", how to draw conclusions from recorded data, and to make generalizations from their conclusions. Includes tutorial and practice problems. Teacher's guide.

BIOLOGY

TRS-80 DISKETTE H

8 TRS-80 Diskettes, 48K (15 Programs).....$225.00
8 Network 3 TRS-80 Diskettes.....$450.00
For review and reinforcement of Biology topics. Format is: question...information if needed...more information if needed. Uses latest branching techniques and branches to questions in sub-program on any concept with which student has difficulty. Student names and grades are stored for teacher use. Numerous high resolution graphics for such things as cells, nerves, charts and graphs. Teacher's guide. Please give program title when ordering.

ANIMAL REPRODUCTION
Emphasizes the development of the sperm, egg, and the fertilized egg.

ASEXUAL REPRODUCTION
Emphasis is on mitosis and meiosis. Includes asexual reproduction in simple organisms.

BIOCHEMISTRY
Reviews basic atomic structure, balancing equations, and properties of proteins and carbohydrates.

CELLS
Questions and information on cell theory, cell structures, single celled organisms, and the difference between animal and plant cells.

CLASSIFICAITON
Reviews the organization of living things.

DIGESTION
Questions deal with nutrients, digestion in simple organisms, and the digestive process in humans.

ENDOCRINE SYSTEM
Emphasizes hormones that are secreted by the ductless glands, the effects of these hormones, and some of the problems that may develop when too little or too much hormone is produced.

EXCRETION
Reviews the nature of metabolic wastes, how wastes are removed in some simple organisms and how the kidneys function in humans.

GENETICS
Questions and background information on results from various crosses on peas, four o'clocks, and fruit flies. Also material on sex-linked diseases.

LOCOMOTION
Reviews the function of bones and muscles as well as the topics of types of muscles and joints.

NERVOUS SYSTEM
The nature of a nervous impulse, nerve impulses in simple organisms, reflexes, and the chemicals involved in the transfer of impulses.

PHOTOSYNTHESIS AND TRANSPORT
Gives students better understanding of photosynthesis, the transport system of plants, and the function of various kinds of plant cells.

REPRODUCTION PLANTS
Includes asexual reproduction and sexual reproduction in plants. Strong emphasis on processes that take place within the flower.

RESPIRATION
Questions cover the process of cellular respiration, the structures that are involved, and the chemistry of the process.

TRANSPORT
Reviews the blood system, the lymph system, blood cells, and blood types.

(Each title 1 TRS-80 Diskette, 48K.....$27.00)
(Each title, 1 Network 3 TRS-80 Diskette.....$54.00)

CHEMISTRY

TRS-80 DISKETTE H

5 TRS-80 Diskettes(15 programs).....$225.00
3 Network 2/3 TRS-80 Diskettes (15 programs).....$450.00
Designed to review and reinforce chemistry concepts. Names and grades can be stored on disk file. Teacher's guide.
NOTE: may only be used on TRS-80 Model III with twin drive, 48K.

PERIODIC TABLE
Formulas, atomic radius, mass number, ionization energy, activity, combining capacity, and the number and type of particle in an atom.

ELECTRON STRUCTURE
Orbitals, valence electrons, electron structure, filling of sublevels and the relationship of valence electrons to the periodic table.

OXIDATION REDUCTION
Reviews oxidation numbers, half reactions, balancing oxidation reduction reactions and determining the number of electrons lost and gained.

ACID BASE THEORIES
Exercises on Bronsted Lowry theory, naming acids, neutralization reactions and salts.

SOLUTIONS
Practice and learn naming, ion concentration, molarity, calorie problems, and the formation of precipitates.

BONDING BETWEEN MOLECULES
Practice with concepts related to hybridization, shapes of molecules, Van der Waals forces, and network bonds.

GAS RELATIONSHIPS
Boyle's Law, Charles's Law, partial pressure, volume-volume equation relationships, Weight-volume equation problems and densities of gases.

MOLES AND FORMULAS
Converting grams to moles, number of molecules to moles, Avogadro's relationship and percent composition.

ELECTROCHEMICAL CELLS
Questions pick random variables for problems on electrochemical cells, voltages, oxidizing and reducing agents in cells, and the direction of both electron flow and ion flow.

ORGANIC CHEMISTRY
Questions of identifying isomers, names of simple hydrocarbons and their isomers, functional groups, and some types of reaction are asked.

ACID BASE PROBLEMS (PH of Solutions)
Students are asked questions dealing with pH, titration problems, dilution of acids and the neutralization of solid bases.

KINETICS
Practice with problems covering the topics of reaction rates, collision theory, heat of reaction, and activation energy.

CHEMICAL EQUATIONS
Students get practice with balancing equations, mole relationships in equations and weight-weight problems.

EQUILIBRIUM
Review of Le Chatelier's principle, calculating the equilibrium constant and relating Ksp to solubility of a compound.

BONDING IN MOLECULES
Besides covalent and ionic bonding students practice on problems covering bonding properties, and the relationship of bonding to the periodic table.

(Each title, 1 TRS-80 Diskette, Model III with twin disk drives, 48K.....$27.00)
(Each title, Network 2/3 TRS-80 Diskette.....$54.00)

IDENTIFYING MINERALS

TRS-80 DISKETTE J H

1 TRS-80 Diskette, 32K; Backup.....$39.00
1 Network 2/3 TRS-80 Diskette.....$117.00
Game format. A mountain climbing expedition provides the setting for students to test their knowledge about the lab identification of mineral's properties: color, streak, luster, hardness, cleavage, fracture. Each correct answer results in a chance to use a different climbing tool. Teacher's Lesson Planner with complete synopsis of material contained in program.

PHYSICAL SCIENCE PACKAGE

TRS-80 DISKETTE J H

Complete Series (3 Sets; 4 Diskettes); Backups.....$279.00
Network 3 Series (3 Sets; 4 Diskettes).....$837.00

CHEMISTRY I
1 TRS-80 Diskette, 32K; Backup.....$89.00
1 Network 3 TRS-80 Diskette.....$267.00
Game format. Students answer questions about solids, liquids, gases, phase changes, atomic structure, periodic table, bonding, and acids and bases. Three games: climbing Focus Mountain, road race and betting money on a game-board. Extra help provided for incorrect responses. Teacher's guide with complete synopsis of each game.

ENERGY: HEAT AND SOUND
1 TRS-80 Diskette, 32K; Backup.....$69.00
1 Network 3 TRS-80 Diskette.....$207.00
A snowball fight and a sharpshooters contest are the rewards for correct answers about heat energy, temperature, sound energy, and wave motion. Teacher's guide contains a complete synopsis of each game for teacher reference.

MATTER AND ENERGY
2 TRS-80 Diskettes, 32K; Backup.....$159.00
2 Network 3 TRS-80 Diskettes.....$477.00
Correct answers allow students to play games - wagering money on a game-board; racing the clock; assembling a stranded rocket ship and returning to earth; and a sharpshooter contest at a shooting gallery. Topics include: Elements and Symbols; Compounds; Mixtures; Physical and Chemical Change; Potential and Kinetic Energy; and Energy Changes. All programs provide extra help for incorrect responses. Comprehensive teacher's guide contains complete synopsis of each game.

PHYSICS SERIES

TRS-80 DISKETTE H

Complete Series (2 Sets; 2 Diskettes).....$400.00
These 30 computer-assisted-instruction programs generate questions which help students review and reinforce physics topics. Assistance is provided when incorrect answers are entered. Includes loading instructions.

PHYSICS I
1 TRS-80 Diskette, 48K (14 Programs).....$200.00
- Linear Kinematics
- Projectile Motion
- Momentum/Energy
- Energy and the Inclined Plane
- Inelastic Collisions
- Centripetal Force
- Pulley Systems - Machines
- Calorimetry
- Specific Heat Capacity
- Heats of Fusion/Vaporization
- Vector Analysis I
- Vector Analysis II
- Projectile Analysis
- Calorimetry Analysis

(Each title, 1 TRS-80 Diskette, 48K.....$25.00)

PHYSICS II
1 TRS-80 Diskette, 48K (16 Programs).....$200.00
- Specific Gas Laws
- General Gas Law
- Thermodynamics I
- Thermodynamics II
- Transverse Standing Waves
- Longitudinal Standing Waves
- Mirrors and Lenses
- Refraction of Light
- Series Circuit Analysis
- Parallel Circuit Analysis
- Series/Parallel Circuit Analysis
- Electric Field Analysis
- Photoelectric Effect
- Total Internal Reflection
- Gas Law Analysis
- Optics Analysis

(Each title, 1 TRS-80 Diskette, 48K..... $25.00)

GENE MACHINE

TRS-80 DISKETTE J H

1 TRS-80 Diskette, 48K; Backup.....$69.00
Designed to reinforce what students read in texts about DNA replication and protein synthesis. Provides a brief review, simulates the functions of DNA and RNA, and then lets the students themselves be in charge and manipulate genetic material. Includes the following tasks for students to perform: Shows students a strand of DNA and then they synthesize a complementary strand. From a single strand of DNA students transcribe a strand of mRNS. Students can input an mRNA codon and see the amino acid for which it codes. Students input an amino acid and see the corresponding mRNA codons. Students construct their own polypetide chains by inputting a series of mRNA codons. Teacher's guide.

IDENTIFYING INSECTS

TRS-80 DISKETTE J H

1 TRS-80 Diskette, 48K; Backup.....$69.00
1 Network 3 TRS-80 Diskette.....$207.00
Helps students explore the world of insects: morphology, behavior, habitats, and characteristics. In a game format, students try to identify insects using as few clues as possible. They can count and examine the wings, notice colors and markings, observe the antennae and mouth parts or contact the "collector" for information such as habitat and behavior. "Beginners" and "Advanced" level. Extensive teacher's guide.

INFERENCE AND PREDICTION

TRS-80 DISKETTE
or CASSETTE J H

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 TRS-80 Cassette, 16K; Backup.....$45.00
The classic "Black Box" activity comes to the computer. Numbers and letters go through a machine on the screen called the CHANGER. Game players observe changes in the numbers or letters made by the machine, make inferences about the internal workings of the machine, and attempt to predict what will come out of the CHANGER next. Both game programs in the package provide a learning environment which fosters critical thinking and insight. Develops logic, math, and fundamental scientific predicting skills. Teacher's guide.

TEETH: ANIMAL SKULLS AND HUMAN TEETH

TRS-80 DISKETTE I

1 TRS-80 Diskette, 48K; Study Cards.....$38.00
1984 Creative Computing Outstanding Software Award.
Introduces students to the three types of teeth: incisors, canines, and molars. The Study Cards have pictures of beaver, deer, dog, and fish skulls. In the middle part of the program, the children learn about their own teeth with the help of teeth diagrams on the monitor screen. Additional Study Cards show the inside of a tooth and skull X-rays. The importance of proper dental care is emphasized in the last part of the program. Teacher's guide.

ROCKS: PROPERTIES AND USES OF MINERALS

TRS-80 DISKETTE I

1 TRS-80 Diskette, 48K; Rock Kit.....$68.00
1984 Creative Computing Outstanding Software Award.
The first part of the program introduces the child to the properties of rocks: color, shiny or dull, weight, feel, crystal shape, streak color, and hardness. Next, the computer helps the student to identify the rocks by asking questions about their properties. In the final portion of the program, the important uses of the rocks are learned. Eighteen rock samples and other testing materials are included with this Microcourse. Teacher's guide.

SCIENCE SERIES

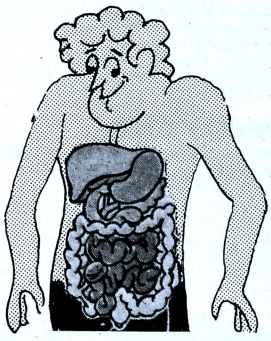
TRS-80 DISKETTE
or CASSETTE

S E P I J H C A

SCIENCE I
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00
Electronics - An Ohm's Law practice program that graphically displays both series and parallel circuits for the student to solve. **Lost On the Moon** - Student must select items most useful for survival on the moon. **Cup the Ball** - Simulation of a physics lab project in which a cup is placed a random distance horizontally and vertically from the top of a table. Student must calculate the horizontal speed the ball must have to roll off the table and travel into the cup. Computer graphically displays the ball, cup and traces the trajectory of the ball (hopefully into the cup).

SCIENCE II (Chemistry)
1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00
1 TRS-80 Cassette, 16K; Backup.....$50.00
Valence - quizzes students on the most stable valence of up to 97 common elements. **Elements** - student given the name of an element and is asked to identify it as a metal, non-metal, or inert gas. **Symbol** - Drills students on chemical names and symbols. **Atomic Weight** - drills students on the atomic weight of elements. **Atomic Number** - drills students on the atomic numbers of elements.

SCIENCE III (Physics of Motion Formulas)
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00
Provides drill and practice with various formulae dealing with the physics of motion. In each program, a problem is presented and an answer solicited. If correct, student is congratulated and asked to try another problem involving a different variation of the formula. Should the response be incorrect, student is taken through a step-by-step solution with appropriate corrections along the way. In each program, students may use their own calculator or one offered by the computer.



YOUR BODY SERIES

TRS-80 DISKETTE

S E P I J H C A

Complete Series (2 Sets, 2 Diskettes).....$199.00
Network 3 Series (2 Sets, 2 Diskettes).....$597.00
Game format. All programs provide extra help for incorrect responses. Teacher's Lesson Planner provides complete synopsis of material contained in programs.

YOUR BODY 1
1 TRS-80 Diskette, 32K; Backup.....$119.00
1 Network 3 TRS-80 Diskette.....$357.00
Students go to a money game-board and take risks as they answer questions about the **Human Body.** Students are tested on the **Digestive System.** Each correct answer sends them further along their way through a graphic of the digestive system. Each correct answer about **Blood** results in another part of the human body being built. The goal? To build the body in the fewest turns possible. Students can compete with each other or the computer as they engage in a road race in which they only progress by answering questions correctly about the **Circulatory System.**

YOUR BODY 2
1 TRS-80 Diskette, 32K; Backup.....$119.00
1 Network 3 TRS-80 Diskette.....$357.00
Assemble a rocket ship and return to earth from the planet Uranus by answering questions correctly about the **Muscular System.** A mountain climbing expedition provides the setting for students to test their knowledge about the **Skeletal System.** Students wager money on categories of their choice and compete agianst each other in **Brain, Nervous System and Pot Luck.** A computerized snowball fight is the reward for successfully answering questions about the **Endocrine System.**

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

SOCIAL STUDIES

AMERICAN GOVERNMENT

TRS-80 DISKETTE
or CASSETTE

J H

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 TRS-80 Cassette, 16K; Backup.....$45.00
Covers eight areas of American Government: Citizenship and Immigration, Constitution, Legislative Department, Executive Department, Judicial Department, Electoral Process, State Government, and Local Government. The user may choose a review option or a quiz option. Backup.

AMERICAN HISTORY

TRS-80 DISKETTE
or CASSETTE

I

6 TRS-80 Diskettes, 48K.....$169.00
6 Network 2/3 TRS-80 Diskettes.....$169.00
6 TRS-80 Cassettes, 48K.....$169.00
Interactive, branched programming allows students to become active participants in historical adventures. In each program a fictional or historical character guides the student through activities of the time period. During the adventure, the student has the opportunity to make certain choices and to discover the results of those decisions. When an incorrect decision is made, the information needed for decision-making is presented again at a lower reading level. The student is learning much about the time period as s/he assimilates and reviews the information needed to make the right choices. For review, a comprehensive, ten question quiz ends each program. Teacher's guide.

Jamestown - Pocahontas guides the student through the initial settlement of Jamestown.

Mayflower and the Pilgrims - Priscilla Alden's journey to the New World on the Mayflower and the early adventures of the Pilgrims.

Colony Settlement - William Dunn, a fictional English tavern keeper, helps the student choose a colony to settle in.

Western Expansion: Daniel Boone - Jemima Boone tells about her family's adventures west of the Appalachians.

Revolutionary War, Loyalist and Patriot - Ben Franklin asks the student to pick either the Loyalist or Patriot side in the Revolutionary War. Loyalist and Patriot roles are then explained.

Lewis and Clark Expedition - Sacagawea travels with the student on the Lewis and Clark expedition.
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

ECONOMICS

TRS-80 DISKETTE

H C

5 TRS-80 Diskette, 32K; Backup.....$159.00
5 Network 3 TRS-80 Diskettes.....$477.00
What is Economics? - Interactive exercises and review questions help your students learn about the meaning of economics and the concepts of "needs", "wants", and "factors of production". **Economics: Definitions and Laws** - Beginning with the Law of Scarcity, students learn the fundamental questions every economics system has to answer: production possibilities, opportunity costs, and supply and demand. Totally interactive through the use of exercises, questions, supply and demand curves, and production possibility charts and graphs. **Economic Systems: Traditional, Command, Market** - Allows students to see how each of these systems deals with the basic questions of econmoics. **Capitalism, Communism and Socialism** - Compares these 3 dominant systems and allows students to examine the following concepts within the framework of the three systems: use of capital goods, labor, planning, profit, and role of government. Graphs provided including money flow and planning in each of the economies. **Teacher's Class Demonstration: Economic Models** - Contains the major graphics and models from the previous four programs. Teachers can select models and graphics of their choice for use in class demonstrations. These include: law of scarcity, production possibilities, supply and demand, factors of production, needs and wants, functions of money, role of labor and comparisons of economic systems. Excellent teacher's lesson planner with extensive helps.

FAMOUS NAMES IN AMERICAN HISTORY

TRS-80 DISKETTE

J H

1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00
Students are given clues to the identities of famous people in American history and try to guess the name. Student may run the program alone as a drill or compete against another student. Review section allows students to look at the names and clues. Drill and practice section quizzes the students on the historical figures. Includes: **Exploration and Colonization** - from 1000 A.D. through the early 1700's. **Revolutionary War and the War of 1812** - heroes, traitors, and memorable characters from both sides of the 2 wars. **Westward Expansion** - exploration and expansion from the late 1700's through the 1860's. **Civil War** - leaders and heroes from both sides. **Industrial Revolution** - industrial giants and early labor leaders. Guide.

EXPEDITIONS

TRS-80 DISKETTE

I J

1 TRS-80 Diskette, 48K; Backup.....$46.00
Allows students to make and test decisions as they assume the roles of frontier Americans during three historical periods. The **Furs** program simulates fur trade in eastern North America in the 1770's. **Oregon** simulates a trip by covered wagon from Independence, Missouri, to Oregon City, Oregon in 1847. **Voyageur** simulates the transportation of furs by canoe in northern Minnesota and southern Ontario in the early 1800's. Teacher's guide.

HISTORY AND GEOGRAPHY

TRS-80 DISKETTE
or CASSETTE

I J

1 TRS-80 Diskette, 32K; Backup.....$50.00
1 Network 2/3 TRS-80 Diskette; Backup.....$100.00
1 TRS-80 Cassette, 16K; Backup.....$50.00
Revolutionary War Quiz - In this game two players compete in answering questions on the Revolutionary War. It is written so that it would be relatively easy for the user to substitute any questions thus creating a computer quiz on any subject. **Regions of the U.S.** - A drill and practice exercise where the user is asked what region of the United States randomly selected states are located in. **States and Capitals** - This program drills the user on randomly selected states and their capitals. If the user does not know the capital, the computer offers clues to help determine the capital. **Presidents** - A drill and practice session on presidents of the United States. **Country** - Drill and practice on countries and the continent they are located in.

MEMORABLE AMERICANS

TRS-80 DISKETTE

J H

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
Students are given clues to the identites of famous Americans and try to guess their names. Students may run the program alone or with another student as a game. Review section allows students to look at the names and clues. Includes: Inventors and Inventions; Presidents; Black Americans; American Women.

STATES, CAPITALS AND PRINCIPAL CITIES

TRS-80 DISKETTE

I

1 TRS-80 Diskette, 48K.....$39.95
Highly interactive guided drill in basic U.S. geography skills. Motivates students with an arcade style reward game, gives teachers control over several aspects of the program, and includes a student management system. Exercises cover state's map location; name and abbreviation; capital city; locations of principal cities; and regional maps.

TIME TUNNEL: AMERICAN HISTORY

TRS-80 DISKETTE

I J H

1 TRS-80 Diskette, 48K; Backup.....$89.00
1 Network 3 TRS-80 Diskette.....$267.00
The Tunnel Master sends your students into the past to identify famous Americans. Students get clues to the identity of the famous (or infamous) American. Their knowledge of history and their critical thinking skill help students put together the pieces of the puzzle and solve the mystery person's identity. **American History 1760-1860** - includes George Washington, Daniel Boone, Betsy Ross, Frederick Douglas, Samuel Adams and others. **1860-1917** - includes Clara Barton, Thomas Edison, Susan B. Anthony, Alexander Graham Bell, Orville Wright, Abraham Lincoln and others. **1917-1970** - Dwight Eisenhower, Amelia Earhart, Douglas MacArthur, Jesse Owens, Neil Armstrong, Martin Luther King, Jonas Salk, and many more. Teacher's guide.

U.S. HISTORY: THE YOUNG REPUBLIC

TRS-80 DISKETTE

J H

1 TRS-80 Diskette, 32K; Backup.....$89.00
1 Network 3 TRS-80 Diskette.....$267.00
Game format. Extensive teacher's guide with complete synopsis of each game so the teacher can review all material before presenting to the students. **Thirteen Colonies** - A shooting gallery provides opportunites for student sharpshooters to test their knowledge. **Colonial Life** - Students compete against each other or the computer in an auto race as they see who is more of an expert on this topic. **American Revolution** - Students are aksed questions; correct answer allows them to select climbing tools to help them scale Focus Mountain.

WORLD WAR II

TRS-80 DISKETTE

J H

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
Famous Names from World War II. Students are given clues to the identites of famous heroes and villains of World War II. Student then tries to guess the identity of the individual. Student may run the program alone as a drill or compete against another student. Contains a drill/quiz section and a review section. Includes: Famous Places/Battles from World War II, Countries of World War II, Planes and Ships of World War II.

CAREER EDUCATION

CAREER SCAN IV PROGRAM

TRS-80 DISKETTE ■■■■■HC■

2 TRS-80 Diskettes, 48K.....$169.00

A comprehensive career search and exploration package accessing over 700 occupational titles. This program is based on the latest and most usable guidance classification system available--the Standard Occupational Classification (SOC). The SOC provides a useful structure to group the 12,000 primary titles in the Dictionary of Occupational Titles. Totally self-instructional. Students do not need assistance when using them even if they have never used a computer before. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each occupation which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. For one or two drive systems. Manuals and teacher's guides.

COLLEGE SCAN IV

TRS-80 DISKETTE ■■■■■HC■

2 TRS-80 Diskettes, 48K.....$195.00

Covers approximately 1100 colleges nationwide and uses 350 attributes to search them. Based upon the latest comprehensive sources of college and university information. Includes 270 majors or pre-professional programs and all major sports for men and women. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each college which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. Designed for one or two drive systems. Manuals; teacher's guide.

LOGIC, PROBLEM SOLVING and LEARNING GAMES

THINKING SKILLS

TRS-80 DISKETTE
or CASSETTE ■■■IJH■■

1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette; Backup.....$165.00
2 TRS-80 Cassettes, 16K.....$49.00

Challenging problems and intriguing games teach skills in deductive, inductive, analytical and critical thinking. Designed for gifted students, as well. Extensive teacher's guide gives hints on strategies and numerous suggestions for classroom use. Teacher's guide.

WHOSE HOUSE

TRS-80 DISKETTE ■■■IJ■■■

1 TRS-80 Diskette, 32K; Backup.....$40.00

A puzzle-solving game that helps students develop a logical approach to deductive reasoning and the drawing of inferences. A different puzzle each time the game is played. Students solve the puzzle from computer-generated clues.

ADULT BASIC EDUCATION

SURVIVAL MATHEMATICS

TRS-80 DISKETTE
or CASSETTE S■■■■H■A

3 TRS-80 Diskettes, 48K.....$85.00
3 Network 2/3 TRS-80 Diskettes.....$85.00
6 TRS-80 Cassettes, 16K.....$85.00

Taught with a practical, real-life approach, these programs have particular appeal for the older basic student.

Real Cost - Will a special offer really save you money? Learn about sale price, special offers, and shopping comparatively.

Understanding Checkbooks-Statements - Learn how to manage your checking account and keep up with bank statements.

Fractions, Percents and Decimals - Comparing common fractions, percents, and decimals using real-life examples.

(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2/3 TRS-80 Diskette.....$29.95)
(Each title, 2 TRS-80 Cassettes.....$29.95)

High interest, controlled vocabulary programs especially suitable for older Basic Education students.

SURVIVAL SKILLS

TRS-80 DISKETTE
or CASSETTE S■■■■H■A

Complete Series (4 Sets, 27 Diskettes).....$775.00
Network 2 Series (4 Sets, 27 Diskettes).....$775.00
Network 3 Series (4 Sets, 27 Diskettes).....$775.00
Complete Series (4 Sets, 27 Cassettes).....$775.00

Designed to improve your students' reading and thinking abilities. The use of "Real World" topics and a unique branching technique make these lessons especially suitable for the older, basic student. *Each lesson is written on both a 5th grade and a 3rd grade reading level.* Students first read a 5th grade level paragraph and are given a comprehension question. A correct student response is met with a graphic reward and advancement to the next frame. An incorrect response is met with a short explanation of why it is wrong. The same concepts are then presented in a paragraph written on a third grade level and the student is again questioned. The two reading levels utilized in these programs broaden their usefulness for basic skills instruction. By using branching and repetition when responses are incorrect, these programs enable students to arrive at an understanding of the content material and gain the important skills required for reading comprehension. A scoring system based on percent correct is integrated into each program. Teacher's guide.

PERSONAL FINANCE
7 TRS-80 Diskettes, 48K.....$199.00
7 Network 2 TRS-80 Diskettes.....$199.00
7 Network 3 TRS-80 Diskettes.....$199.00
7 TRS-80 Cassettes, 16K.....$199.00
How to Finance a Car
Money
All About Interest
Metric and You
Eating for Good Health
You and Insurance
Credit
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

WORK
6 TRS-80 Diskettes, 48K.....$175.00
6 Network 2 TRS-80 Diskettes.....$175.00
6 Network 3 TRS-80 Diskettes.....$175.00
6 TRS-80 Cassettes, 16K.....$175.00
How to Get and Hold a Job
Job and You
Self-Concept and Your Work
Part-Time Jobs
New on the Job
Interviewing
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

CONTEMPORARY LIVING
6 TRS-80 Diskettes, 48K.....$175.00
6 Network 2 TRS-80 Diskettes.....$175.00
6 Network 3 TRS-80 Diskettes.....$175.00
6 TRS-80 Cassettes, 16K.....$175.00
Friends and You
Age of Responsibility
Map Reading
Succeeding
Decision Making
Law
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

PERSONAL CONSUMERISM
8 TRS-80 Diskettes, 48K.....$235.00
8 Network 2 TRS-80 Diskettes.....$235.00
8 Network 3 TRS-80 Diskettes.....$235.00
8 TRS-80 Cassettes, 16K.....$235.00
Tips on Buying a Used Car
Reading an Advertisement
Consumerism and You
Shopping in a Comparative Way
Laws for Consumers
Consumer Fraud
Consumer Help
Understanding Labels
(Each title, 1 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 2 TRS-80 Diskette.....$29.95)
(Each title, 1 Network 3 TRS-80 Diskette.....$29.95)
(Each title, 1 TRS-80 Cassette.....$29.95)

LEVELS

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

BUSINESS EDUCATION

BUSINESS EDUCATION SERIES

TRS-80 DISKETTE
or CASSETTE ■■■■■HCA

BUSINESS EDUCATION I
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00

Contains four useful business programs: **Loan Amortization** - A complete loan analysis program that will calculate either payment amounts, number of periods, rate of interest, length of the loan, or interest, and print an amortization schedule. **Bank Reconcilliation** - Accepts the beginning bank balance, checkbook balance, checks written, outstanding checks, charges, and reconciles a bank statement. If the reconciliation is off, you may review and modify the outstanding checks, checks written, etc. **Stock Market Simulation** - Simulation where players buy and sell stocks with the objective being to increase their net worth. The simulation allows selection from stocks that fluctutate in price based on market indicators such as prime interest rate, inflation, economic outlook, etc. **Depreciation** - Will calculate depreciation according to the straight line, double declining balance, and sum of the years digit methods and print a depreciation schedule.

BUSINESS EDUCATION 2
1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 2/3 TRS-80 Diskette; Backup.....$90.00
1 TRS-80 Cassette, 16K; Backup.....$45.00

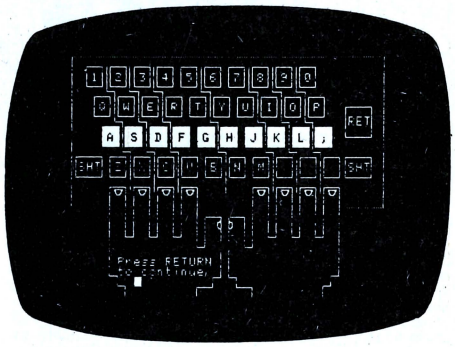
Useful in any accounting curriculum. **Accounting I** - Provides basic accounting concepts including the double entry concept with many graphic illustrations. Covers the accounting equation, introduces the T account, and journal entries. **Accounting II** - Introduces journals, ledgers, and financial statements with numberous graphic illustrations. **General Ledger** - Provides a simulated computerized system that allows the learner to enter transactions, print a trial balance of the general ledger account balances, and financial statements. All output is directed to the screen. General Ledger provides meaningful experiences in working with a computerized accounting system. **Annuities** - Calculates the amount of time that an invested amount will last, based on the interest rate, amount withdrawn, and frequency of the withdrawals.

JUNIOR TYPER

TRS-80 DISKETTE ■■PI■■■■

1 TRS-80 Diskette, 32K; Backup.....$45.00
1 Network 3 TRS-80 Diskette.....$45.00

A beginning typing program designed specifically for grades K-6. Teaches touch typing skills with the aid of innovative graphic devices that show the correct fingering for each letter. Students practice typing drills that use colorful graphic rewards to make the work a little easier as they develop accuracy and speed. Teacher's guide.



TYPING

TRS-80 DISKETTE ■■■IJ■■■

1 TRS-80 Diskette, 48K.....$39.95
1 TRS-80 Diskette, 48K; Backup.....$54.95

Provides guided drill and practice opportunities in basic typing skills as well as a test which determines students' typing speeds. The disk employs an arcade-style reward game to motivate students, gives teachers control over several aspects of the programs, and includes a student management system. Lessons include: Home Row, Top Row, Bottom Row, Upper Case, Numbers and Speed Test. Teacher's guide.

TYPING TUTOR

TRS-80 DISKETTE
or CASSETTE ■■■■JH■■

1 TRS-80 Diskette, 48K.....$29.95
1 Network 2/3 TRS-80 Diskette.....$29.95
1 TRS-80 Cassette, 16K.....$29.95

Great for the beginner. A keyboard in graphics appears on the screen, a letter is flashed and the student must press that key before the next one flashes or the score will suffer. Selectable speeds allow the student to progress at his or her own rate.

HOME ECONOMICS

HEALTH AWARENESS GAMES
TRS-80 DISKETTE ■■■■■ J H C ■

1 TRS-80 Diskette, 48K; Backup.....$99.00

Five programs draw on extensive tables of statistics about people's health, living habits, and other behaviors, as these relate to life expectancy. Prepared to foster awareness of good health practices. Appropriate for junior high school through college to supplement courses in health, biology, nutrition, athletics, and physiology. Includes: **Coronary Risk** - calculates the individual's risk of coronary heart disease and explains the risks. **Why Do You Smoke?** - determines each smoker's primary reasons for smoking, based on the smoker's answers to 18 multiple-choice questions. Offers advice on dealing with smoking and its effects. **Exercise Weight** - on the basis of answers to a series of questions determines the most desirable weight for the individual. User is given a diet pattern that will best suit his or her needs. **Life Expectancy** - dramatically demonstrates the effect of a number of life conditions and personal characteristics on anyone's expected lifespan. **Lifestyle** - offers advice based on the effects of personal living habits on health and life expectancy. Teacher's guide.

HOME ACCOUNTANT
TRS-80 DISKETTE ■■■■■ H C A

1 TRS-80 Diskette, 48K.....$74.95

"...probably the most flexible and versatile personal financial budgeting and planning package on the market today..." **Book of Apple Software 1983.**

A complete home financial management program. Program includes checkbook balancing, budgeting, printing of checks, a personal general ledger and a net worth statement. Custom retrieval allows you to search out and/or print out just the information that you need (i.e. all transactions that might have a tax consequence). Provides graphics for any category by bar graph, line graph, and/or trend analysis. Allows for approximately 1,000 transactions per disk. A good choice for the non-programming computer owner. 137-page User's Guide.

MANAGING LIFESTYLES: SURVIVAL MATH SKILLS
TRS-80 DISKETTE ■■■■■ J H ■■

1 TRS-80 Diskette, 48K; Backup.....$55.00

Simulations designed to strengthen basic skills by involving students in using mathematics in daily life situations. **Diet** - Students plan a day's nutritious meals appropriate to their individual calorie requirements. The computer then rates the students' menu plans. **Comparison Shopping** - Small groups of students cooperate to buy a week's supply of groceries within the tastes and budget of a family of four. **Budget** - "What's it like after I graduate from high school?" Students look at some of the decisions they have to make about college, jobs, marriage, children, houses and cars. Includes teacher's guide with reproducible worksheets and masters for overhead transparencies.

MENUCALC
TRS-80 DISKETTE ■■■■■ J H ■■

1 TRS-80 Diskette, 48K.....$29.00
1 TRS-80 Diskette, 48K; Backup.....$37.00

A tool for Diet/Menu planning. Select food choices and instantly see how the choices affect your nutritional intake. For example, plan a 1500 calorie, low sodium diet. Enter foods and see a running total of calories and sodium. Add or delete foods at any point. Play "what if" with food choices to see how they fit your dietary plans. Or analyze your diet and learn how to make changes. Teacher's guide.

SALT SHAKER
TRS-80 DISKETTE ■■■■■ J H ■■■

1 TRS-80 Diskette, 48K.....$39.00
1 TRS-80 Diskette, 48K; Backup.....$47.00

Offers a tutorial on the problems of excess salt in the diet, gives a brief test, and provides a graph of your salt intake comparing it with the national average and recommended maximums. Teacher's guide.

WEIGHTWATCH
TRS-80 DISKETTE ■■■■■ J H ■■■

1 TRS-80 Diskette, 48K.....$39.00
1 TRS-80 Diskette, 48K; Backup.....$47.00

Gives useful information about fitness or fatness. Teaches the basics of how food, fat and activity relate to weight and fitness. Learn how many calories you burn in various activities; how many calories you need each day to maintain your present weight; your ideal weight range; and what percentage of your weight is fat. Devises a personal weight loss plan based on eating and exercising adjustments. Teacher's guide.

VOCATIONAL/TECHNICAL

CALCULATING BUILDING MATERIALS COSTS
TRS-80 DISKETTE ■■■■■ J H ■■ A

1 TRS-80 Diskette, 32K.....$49.95
1 Network 2/3 TRS-80 Diskette.....$49.95

Helps students learn how to figure the costs of various building materials such as pipe, steel, plywood, molding and other such materials. Includes tutorial on how to figure the costs of these materials. Singles, pairs, linear feet, square feet, and board feet measurements are discussed. Lessons end with a quiz. Allows teacher to store a list of up to ten types of plywood and lumber available in the school shop, including prices. These are then called up when the student is figuring the type of wood being used. The fear of figuring out the cost of the project is now turned into one of the most fun parts of the building of the project. Also allows the teacher to change the materials and prices available in the shop. Printed quiz; teacher's guide.

STATIONARY WOODWORKING EQUIPMENT SAFETY AND OPERATION
TRS-80 DISKETTE ■■■■■ J H ■■ A

2 TRS-80 Diskettes, 48K.....$139.95
2 Network 2/3 TRS-80 Diskettes.....$139.95

Menu-driven. Program covers the parts, safety, and operations of the ten major stationary equipment used in the woodworking shop. Each equipment program includes the use of computer graphics to explain the parts lesson as well as one for the safety and operations lesson. While communicating to the student by name, the points and percentages are given at the end of each lesson. At the end of each equipment program, the totals are displayed on the screen and stored on disk. Teacher can later review the results and have a hard copy made by printing the results on paper with the printer. Requires 2 disk drives. Printed quizzes; teacher's guide.

WELDING EQUIPMENT SAFETY AND OPERATIONS
TRS-80 DISKETTE ■■■■■ J H ■■ A

1 TRS-80 Diskette, 32K.....$79.95
1 Network 2/3 TRS-80 Diskette.....$79.95

Teacher-designed and student tested. Ideal for Occupational Versatility shops. Covers the parts, safety and operations of the major welding equipment used in a metals shop. Includes the use of computer graphics to explain the parts, safety and operations of the machine, including a computer quiz. Test percentages are displayed and then stored permanently on disk. Teacher can later review the results and print the results on paper with a printer. Discusses the following welding lessons: Oxyacetylene Welding, Oxyacetylene Heating and Cutting, Arc Welding, Spot Welding and Wire-feed Welding. Printed quiz masters; teacher's guide.

COMPUTER LITERACY

In this section we have omitted most of the grade level designations because the level is largely dependent upon the previous experience of the computer user. Some adults and teachers can be beginners while some junior high students are quite sophisticated in the use of computer languages and programming (and vice versa). Programs which are designed specifically for younger children are noted in the description. Most programs may be used by junior high level and up.

CLASSROOM COMPUTER START-UP KIT
TRS-80 DISKETTE
with SOUND FILMSTRIP

1 TRS-80 Diskette; 1 Filmstrip; 1 Cassette; Ditto Masters.....$69.00

An array of stimulating get acquainted activities. Containing audio tape, filmstrip, ditto master and program disk, the program will promote competent and effective computer use and help avoid "computer anxiety". Includes: computer development, computer components, capacities and capabilities, computer vocabulary, and an introduction to simple do-it-yourself programming.

HOW TO PROGRAM IN BASIC TUTORIALS
TRS-80 DISKETTE
or CASSETTE

3 TRS-80 Diskettes, 32K.....$69.00
3 TRS-80 Diskettes, 32K; Workbook.....$82.90
3 Network 2/3 TRS-80 Diskettes.....$450.00
4 TRS-80 Cassettes, 16K.....$69.00
4 TRS-80 Cassettes, 16K; Workbook.....$82.90

This software/workbook is designed to be used while you actually have your "hands on" the microcomputer. Students do not need to have any programming background; the workbook and software give students the capability of learning the BASIC programming language in a microcomputer assisted instructional mode. The workbooks are useful as reinforcement as students progress through the programs. Questions are included to stimulate student interaction with the microcomputer and test the student's understanding of the BASIC programming action. Includes: Keyboard operation, Introduction to BASIC, Programming: Beginning, Program Input Commands, Program Branching Commands, Arrays, Character Strings, Functions and Subroutines, more. Tutorial software parallels chapters in the workbook.

INTRODUCTION TO TRS-80 KEYBOARD AND TRS-80 BASIC
TRS-80 DISKETTE
with AUDIO CASSETTES

3 TRS-80 Diskettes, 32K; 3 Audio Cassettes.....$99.00

Everything students need to know to get started on the road to computer literacy -- without reading manuals. Hands-on, interactive instruction is provided through audio cassettes and demonstrations on diskettes.

Microcomputer Keyboard (one diskette, one audio cassette) - teaches how to use all the special function keys, as well as touch typing. Exercises stress words and combinations used in programming.

New Step by Step (two diskettes, two audio cassettes) - twenty lessons about programming in BASIC that enable users to start programming immediately.

Includes instructions, workbook, finger charts.

MEET THE COMPUTER SERIES FOR THE TRS-80
KIT

Complete Series (2 Kits).....$64.00

Recommended for purchase in **Curriculum Review, Journal of Computers in Mathematics and Science Teaching.**

MEET THE COMPUTER: BEGINNING BASICS FOR TRS-80
15 Activity Folders; 2 Information Cards; 3 Reproducible Sheets; Programmer's Guide.....$29.00

Color-coded activity folders teach BASIC programming, statements and commands. How-to program for students and teachers who want to develop computer literacy from the begining or simply to brush up on their computer skills.

MEET THE COMPUTER: INTERMEDIATE BASICS FOR THE TRS-80
21 Activity Folders; 4 Reproducible Sheets; Answer Key Cassette.....$35.00

Color-coded activity folders give easy, step-by-step lessons on how to use a variety of intermediate functions, commands and statements. Sets up situations and solves them to illustate why and how to use functions and statements.

ROBOT PROBE: AN INTRODUCTION TO PROGRAMMING
TRS-80 DISKETTE

1 TRS-80 Diskette, 32K; Backup.....$55.00
1 Network 2/3 TRS-80 Diskette; Backup.....$165.00

"...valuable introduction to fundamental programming concepts and principles..." **Health Education, Oct 31.**

Students learn to think logically in this game which uses a pseudo language to introduce students to programming. A robot lands on a planet along with four probes and a space module. The student's mission is to program the robot to pick up the four probes, load them into the module and blast off. The robot only understands certain commands so the students must learn to talk the robot's language and think logically if they want to successfully complete the mission. Skill levels range from entering a single command through finding the most compact program for a particular task. Teacher's guide.

SIMULATED COMPUTER
TRS-80 DISKETTE
or CASSETTE

1 TRS-80 Diskette, 32K.....$39.95
1 Network 2/3 TRS-80 Diskette.....$69.95
1 TRS-80 Cassette, 16K.....$39.95

"A highly specialized graphics-centered program that demonstrates the operation of machine language in a small computer..." Learning Software Computer Awards, 1983. **Learning, Dec 1982.**

Grade 7-up. Gives students an immediate understanding of computers and machine language programming principles. Students begin by running sample programs, then write their own programs in simplified machine language.

PET and COMMODORE 64 MICROCOMPUTERS (from Commodore Computer Systems), General Information

This educational software is available on cassette, diskette or cartridge. Not all titles are available in each format. Please check catalog description and be sure to specify on your order whether you want cassette, diskette, or cartridge.

Listings below indicate materials designed for each machine. Please be sure your machine has enough memory ("K") to meet or exceed the requirements given for the title you wish to purchase.

ENGLISH

ALPHABET CIRCUS
DISKETTE E P

1 Commodore 64 Diskette, 64K.....$29.95
Six lively, entertaining games with a circus theme help students learn the alphabet. Includes: Meet the Circus, Lost Letter, Alphabet Parade, Secret Letter, Juggler, Marquee Maker. User's guide.

ARCADEMIC SKILL BUILDERS IN LANGUAGE ARTS
DISKETTE I J

"...quick, imaginative and as alluring as any video game..." **Electronic Learning, Oct 1983.** *"...comes with an impressive packet of documentation."* **Softalk, July 1983.**
Learning is easy when students are having fun. Each of these six *arcade type games* provides a bright, fun approach to learning with practice and drill in vital language arts areas. Each game has nine different speeds and four levels of reading and vocabulary difficulty. The games run from one to five minutes, are either paddle or keyboard controlled, and can be used with or without sound effects. For students of all ages needing practice in the language arts.

***Each $34.00 set includes 1 Commodore 64 Diskette and a user's guide.**

****Each $44.00 set includes 1 Commodore 64 Diskette with instruction sheet; 21 Duplicating Masters for worksheets; 3 Progress sheets; and a 28-page teacher's guide which provides specific data base for each game and complete instructions for program implementation.**

VERB VIPER.....*$34.00/$44.00**
Subject/verb agreement at four levels.

WORD INVASION.....*$34.00/$44.00**
Recognition of six parts of speech.

WORD MAN.....*$34.00/$44.00**
Word-building through patterns.

SPELLING WIZ.....*$34.00/$44.00**
Frequently used and commonly misspelled words.

WORD RADAR.....*$34.00/$44.00**
Sight word recognition.

WORD MASTER.....*$34.00/44.00**
Antonyms, synonyms, and homonyms.

BASIC READING SKILLS I SERIES
DISKETTE I

Complete Series (2 Sets) Pet Diskette, 16K.....$120.00
Complete Series (2 Sets) Commodore 64 Diskette, 64K$120.00
Included in Minnesota State Department of Education High Quality Courseware List, 1984.
Reading is rewarding. Reading is for reasoning, researching, and relaxing. Reading can be all this, and more–but only if you know how. Animated graphics, informative stories and guided questions provide practice. For grades 5 and up. User-friendly. Comprehensive teacher's guide with documentation.

BASIC READING SKILLS I: INTRODUCTION
1 Pet Diskette, 16K.....$60.00
1 Commodore 64 Diskette, 64K.....$60.00
This title is an introduction and *must be viewed before using any of the Basic Skills Practice Programs.* Contains the following programs:
- How to Recall Details
- How to Identify the Main Idea
- How to Draw Conclusions
- How to Put Things in Order
- Review of the Four Basic Skills

BASIC READING SKILLS I: PRACTICE A
1 Pet Diskette, 16K.....$60.00
1 Commodore 64 Diskette, 64K.....$60.00
Contents: A Bicycle Trip; Fish for the Queen; Rent-A-Cow; Asparagus; People Bites. Practices 4 Basic Reading Skills listed above.

S E P I J H C A **LEVELS**
- **S** - Special Needs
- **E** - Early Learning
- **P** - Primary Grades
- **I** - Intermediate Grades
- **J** - Junior High
- **H** - High School
- **C** - College
- **A** - Adult

CAPITALIZATION PRACTICE
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides highly interactive guided drill in capitalization and motivates students with an arcade-style reward game. Students may select from capitalizing the first word in a sentence and the pronoun "I"; capitalizing proper personal names; the days of the week and the months; holidays and special days; and proper place names. A teacher-selected percentage of correct answers allows student to play a fun arcade-style game. Includes student management system. Teacher's guide.

COMMAS
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides highly interactive guided drill in the use of commas, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Includes: Using commas in addresses, in dates, in series, in compound sentences, and to set off subordinate clasuses. Students are presented with a run of sentences (the teacher determines the number) in which they must place commas in the correct positions. If they score a certain percentage, which may be adjusted by the teacher, they may choose to play an arcade style game or to work another lessons. Teacher's guide.

COMPUTER DICTIONARY SERIES (A Spelling and Vocabulary System)
DISKETTE P I J H

This easy-to-use, versatile program provides a fun way to learn the meaning and spelling of new words. Easily adaptable to any anthology or subject matter. Teacher's guide.

COMPUTER DICTIONARY
2 Commodore 64 Diskettes, 64K; Backup.....$49.00
Student Disk: Students are presented with either definitions or incomplete sentences and must guess the mystery word. **Teacher Disk:** Enables teachers to create an unlimited number of new word lists and definitions. Can be tailored to any difficulty level or subject area.

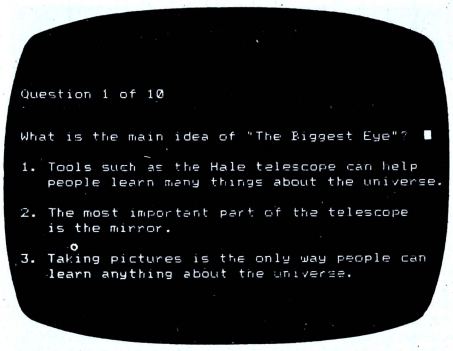
COMPUTER DICTIONARY: WORD LISTS Grades 4-9
5 Commodore 64 Diskettes, 64K.....$59.00
A series of ready-to-use word disks. Each disk, containing over 300 words and definitions, has been carefully prepared to coincide with elementary and middle school reading curriculum. Lists include prefixes, rootwords, contractions as well as special categories such as library terms, literary terms and words from famous people and places.

CONSONANT-VOWEL-CONSONANT
DISKETTE or CASSETTE P I

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95
Seven steps are shown on the screen. A blank square, a vowel and a consonant appear at the bottom of each step. the student types in the beginning consonant to make a word. If a proper word is made, a happy face appears above it on the screen, and the student moves up to the next step. A sad face appears if the consonant does not make a word, but the student may try again and again until a word is made, and a smile replaces the sad expression. After the last step is completed, a huge, happy, winking face fills the screen. The student may then continue with a new set of steps displaying a different vowel-consonant ending. Teacher's guide.

CUSTOMIZED CONCENTRATION BUILDER
DISKETTE P I J

1 Commodore 64 Diskette, 64K.....$34.95
A concentration game that can help reinforce facts, lessons, and memory skills. Players must uncover matches. Matching pairs are provided by the program or teachers may easily provide their own matching material. Teacher's guide.



CONTENT AREA READING SERIES
DISKETTE I

Provides practice in reading articles from content areas. Motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Each disk provides tutorial information explaining how different reading skills can be used to effectively comprehend particular content area materials. Articles are written at a 5-6 grade reading level while the interest level is appropriate for students through the high school level. Students choose one of the five articles to read and then, after reading it, answer questions pertaining to the article. Questions are divided into six categories of comprehension skills: main idea, vocabulary, details, fact or opinion, sequence, and inference. At the end of each run of questions students who score a certain percentage (which may be adjusted by the teacher) may play a challenging arcade-style game or choose to read another article. Student management system holds up to 200 student files. Teacher's guide with each title.

CONTENT AREA READING: LITERATURE
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

CONTENT AREA READING: MATH
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

CONTENT AREA READING: SCIENCE
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

CONTENT AREA READING: SOCIAL STUDIES
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

DRAGON'S KEEP
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$29.95
"The game is fun; exciting things happen...both entertains and educates in a first-class manner...there is no killing, no zapping, no squishing and no injury in the entire game..." **Softalk, Feb 1983.**
A captivating adventure into dragon territory that develops reading comprehension. Any child who can read at the second grade level can play the game without help. User's guide.

ENGLISH ACHIEVEMENT SERIES
DISKETTE or CASSETTE H

5 Commodore 64 Diskettes, 64K; Backup.....$140.00
5 Commodore 64 Cassettes, 64K.....$110.00
"...the English Achievement series is a comprehensive package that should prove an excellent tool for both group instruction and individual student review." **Electronic Learning.**
Designed as a grammar practice for the College Entrance Examination Board's English Composition Exam this distinguished series of programs is also an excellent English grammar tutorial and review for high school students. Sentences containing errors are presented in batches of sixteen. When the student gives an answer, s/he is told whether the answer is correct or incorrect. In either case, the error involved and a correct rewrite with an explanation is given. The part of the sentence which is incorrect is highlighted. The student is given encouraging remarks that indicate progress. If s/he misses one type of error more than twice, this is shown. After each batch of sixteen sentences an analysis is given to indicate kinds of errors being made and approximate Achievement score. The student may choose to continue with another batch of sentences, and the analysis is updated. Since each program in the series presents a different format which appears on the CEEB's English Achievement Examination, we recommend purchase of the complete series for successful College Board preparation.

ENGLISH ACHIEVEMENT I
ENGLISH ACHIEVEMENT II
ENGLISH ACHIEVEMENT III
ENGLISH ACHIEVEMENT IV
ENGLISH ACHIEVEMENT V
(Each title, 1 Commodore 64 Diskette; Backup...$29.95)
(Each title, 1 Commodore 64 Cassette.....$25.95)

EASY AS ABC
DISKETTE E P

1 Commodore 64 Diskette, 64K.....$39.95
Five games that introduce the alphabet in a variety of fun and engaging ways. Children learn letter recognition, alphabetical sequence and upper and lower case. A Picture Menu makes it easy for children to select from Match Letters, Dot to Dot, Leapfrog, Lunar Letters or Honey Hunt. A diskful of colorful animated graphics such as jumping frogs and buzzing bees keep children fascinated. User's guide.

FLASH SPELL HELICOPTER
DISKETTE or CASSETTE P I J H

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95
Graphics accompany this spelling/game program designed for all grade levels. Teacher has the option to enter words by simply replacing or adding data lines. Written instructions are included for this purpose. A randomly selected word is flashed on the screen for one-half a second. If the answer is incorrect, the word is flashed again for an additional one-half second. This continues until the student spells the word correctly. For each word spelled correctly the first time, the student earns 10 seconds of game (helicopter) time. When the student chooses to stop spelling s/he may play the helicopter game for the number of seconds earned. In order to play another game, the student must again earn time by spelling more words correctly. Teacher's guide.

FUNBUNCH SERIES
DISKETTE P I J H

Each program contains over 2000 words and phrases or definitions. The elementary level word list can be accessed by grade. The college prep's vocabulary list can be accessed by an alphabetical sequence. Programs allow you to enter your own words and phrases and you can save them to disk. Built-in printer option. Effective teaching tool for speed reading as well as remediation. Guide.

FUNBUNCH: ELEMENTARY
FUNBUNCH: INTERMEDIATE
FUNBUNCH: COLLEGE PREP

(Each title 1 Commodore 64 Diskette, 64K.....$39.95)

GETTING READY TO READ AND ADD
DISKETTE E P

1 Commodore 64 Diskette, 64K; Backup.....$55.00
Sound, color and animation helps primary students identify and match shapes, upper- and lower-case letters and numbers. Every correct answer generates an imaginative on-screen reward. Teachers can customize the programs for individual or classroom needs by controlling selection of numbers and letters. Teacher's guide.

GOOFY'S WORD FACTORY
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95
Today, Goofy starts his new job at the word factory. As words move along the conveyor belt, it's his job to sort them out, dropping each in the chute where it belongs -- nouns in the noun chute, verbs in the verb chute, and so one. He can carry each word to its proper chute, but that takes time. Or he can throw the words, but he'll have to watch out for passers-by. Goofy sure could use your help. If he does well he may even get promoted. **Skill Focus:** Grammar/Parts of Speech; Sentence Construction. User's guide.

GRAMMAR I
DISKETTE or CASSETTE I

1 Pet Diskette, 16K; Backup.....$45.00
1 Pet Cassette, 16K; Backup.....$45.00
1 Commodore 64 Diskette, 64K; Backup.....$45.00
1 Commodore 64 Cassette, 64K; Backup.....$45.00
Recognizing and reinforcing parts of speech. The program randomly selects sentences and displays them on the screen. Each time the student presses the space bar, the program will display a word from the sentence in a box being held by a robot. The student indicates what part of speech it is and presses the return key. If he is correct, the robot jumps up and down. Contents: Recognition of adjectives, verbs, adverbs, pronouns, nouns, and person, place or thing. Includes backup and teacher's guide.

IDENTIFYING PARTS OF SPEECH
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides highly interactive guided drill in identifying parts of speech, and motivates students with an arcade-style reward game. Includes: identifying nouns, verbs, pronouns, adjectives, adverbs, and prepositions. A pre-set (by teacher) percentage of correct answers allows student to play an arcade-type game. Includes a student management system. Teacher's guide.

GRAMMAR EXAMINER
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$44.95
Climbing a newspaper hierarchy can be a fun way to learn grammar. Students begin as cub reporters with *The Grammar Examiner* newspaper and learn to edit stories, gradually moving up in position and salary until they become the Editor-in-Chief. But they must watch their grammar and deadlines. They could be presented with a paragraph to edit or a multiple choice grammar question they must answer. Teaches important grammar skills in a fun and exciting way. Includes punctuation, capitalization, subject-verb agreement, pronoun-antecedent agreement, verb tenses, adverb and adjective usage and homonyms. Multiple skill levels. Over 150 multiple choice grammar questions and paragraphs, each with numerous grammatical mistakes to be edited, are built into the program. Provides hours of grammar practice. Teachers may add their own grammar problems. Teacher's guide.

KERMIT'S ELECTRONIC STORYMAKER
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95
Allows children to create their own animated stories using the Muppets as actors. Teaching the rudiments of sentence structure while it builds vocabulary, the program has been enthusiastically received by the children with whom it was tested. This program lets kids make Kermit, Miss Piggy, Gonzo and the rest dance, fly spaceships, or sail boats in settings all the way from the ocean floor to the surface of the moon. Makes the child an active participant in the story's creation. User's guide.

KIDWRITER
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$26.95
"...super program with great potential to inspire budding writers." **Run, Jan 1985.**
Children can create their very own storybook, make colorful scenes, then write stories to go with them. There's music and a choice of 99 different characters and objects. While it encourages children to create word and picture stories, it introduces them to the fundamentals of word processing. It even lets them make stories that continue from one "page" to another. User's guide.

LEARNING ABOUT SOUNDS IN READING
DISKETTE E P

2 Commodore 64 Diskettes, 64K.....$39.95
Begins with phonics, the building blocks of reading skills. It introduces the sounds of vowels and consonants in reading: short vowels, long vowels and initial consonants, the phonics skills necessary for the beginning reader to develop successful reading or to help improve reading of older students. User's guide.

MAGIC SPELLS®
DISKETTE P I

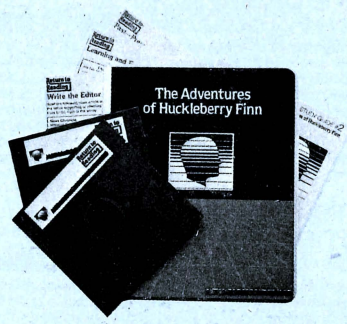
1 Commodore 64 Diskette, 64K.....$34.95
The most spell-binding spelling program around. Children unscramble and practice spelling words. Misty castles, devious demons and wise wizards guide children through a magical mystery tour of spelling. Teacher's notes.
Magic Spells is a trademark of The Learning Company.

MICRO SPEEDREAD
DISKETTE H

1 Commodore 64 Diskette, 64K.....$125.00
"What impresses us...are the developers' approach and the lessons' design and depth of detail...wise investment for those serious about improving their reading speed and comprehension to survive today's deluge of printed material." **InfoWorld, July 1984.**
Professionally developed. Ten learning modules approach speed reading as an information-gathering process. They offer indepth explanations of techniques while providing extensive practice and practical applications. Provides reinforcement, encouragement and feedback as it employs speed reading strategies tested with students and professionals. Users proceed at their own pace. Pre- and post-testing evaluates current speed and comprehension, then adapts the program to meet the specific needs of the user. Comprehensive user's manual.

MOVIEMAKER
DISKETTE J H

1 Commodore 64 Diskette, 64K.....$49.95
"...adds the dimension of time to computer graphics..." **Personal Software, June 1984.** *"...a perfect tool for students interested in computer graphics or the film industry."* **Teaching and Computers, March 1984.**
This innovative tool allows anyone to become a director! No programming ability is necessary. The user devises the action, sets the scene, creates the actors, and plays back the completed computer "movie". A versatile and easy-to-use computer animation system which will bring out the artist and film-maker in your students. Requires a joystick. User's guide.



LITERARY COURSEWARE
DISKETTE I J H

RETURN TO READING. Help your students get more out of the books they read! Even though teacher's time is limited, these programs allow each student to participate fully in individualized extended learning activities. Includes testing and measurement system. Best of all, it's fun! Students enjoy the responsive, interactive and self-paced computer activities. Advanced branching individualizes each lesson.

Each program consists of games and activities covering important elements of the book such as mood, setting, characterization and use of figurative language. Also includes comprehension questions on main ideas, details, sequence and vocabulary. Games and other exercises help students explore their feelings about the book, increases their understanding and appreciation, and encourages further reading.

Each program includes: 1 Commodore 64 disk with backup, 64K, 16 page study guide, reproducible student response sheets, and a user's manual.

You will want several titles for your school collection.

Save on multiple purchases:
1-4 Titles, each title.....$70.00
5-9 Titles, each title.....$59.00
10-19 Titles, each title.....$55.00
Over 20 Titles, each title.....$49.75

ADVENTURES OF HUCKLEBERRY FINN
ADVENTURES OF TOM SAWYER
ALL QUIET ON THE WESTERN FRONT
ANIMAL FARM
BILLY BUDD
BLACK STALLION
BORN FREE
BRAVE NEW WORLD
CALL OF THE WILD
CHARLIE AND THE CHOCOLATE FACTORY
CHOCOLATE WAR
CRY THE BELOVED COUNTRY
DAY NO PIGS WOULD DIE
DIARY OF ANN FRANK
DRACULA
FAHRENHEIT 451
FAREWELL TO ARMS
FLOWERS FOR ALGERNON
GIANTS IN THE EARTH
GIFT OF THE MAGI/RANSOM OF RED CHIEF
GOOD EARTH
GREAT BRAIN
GREAT EXPECTATIONS
HEART IS A LONELY HUNTER
HOBBIT
JOHHNY TREMAIN
JULIUS CAESAR
LION, THE WITCH AND THE WARDROBE
LITTLE PRINCE
LORD OF THE FLIES
MARTIAN CHRONICLES
MIRACLE WORKER
1984
ODYSSEY
OF HUMAN BONDAGE
ONE DAY IN THE LIFE OF IVAN DENISOVICH
PEARL
PIGMAN
RAISIN IN THE SUN
RED BADGE OF COURAGE
RED PONY
ROMEO AND JULIET
SEPARATE PEACE
TALE OF TWO CITIES
TELLTALE HEART/CASK OF AMONTILLADO
TO KILL A MOCKINGBIRD
WHERE THE RED FERN GROWS
WHITE FANG/TO BUILD A FIRE
WUTHERING HEIGHTS

Release date scheduled for May 1985

PARTS OF SPEECH

DISKETTE or CASSETTE ■■■[I][J]■■■

1 Pet Diskette, 32K; Backup.....$35.00
1 Pet Cassette, 16K; Backup.....$35.00
1 Commodore 64 Diskette, 64K; Backup.....$35.00
1 Commodore 64 Cassette, 64K; Backup.....$35.00

In this program, each of the parts of speech is illustrated with examples. Drills are provided in which the student must identify the part of speech for each of the words in randomly selected sentences. Scoring is provided at the conclusion of the drill and practice session.

PARTS OF SPEECH IDENTIFICATION

DISKETTE or CASSETTE ■■■[I][J]■■■

2 Commodore 64 Diskettes, 64K.....$109.90
11 Commodore 64 Cassettes, 64K.....$109.90

Provides drill identifying nouns and verbs; suitable for grades 4 and up. Computer first displays several clues which students can use to help identify nouns (or action verbs, being verbs, etc.). Then a sentence is presented, with a number underneath each word. The student types in the number(s) of the word(s) which are nouns (or action verbs, being verbs, etc.). Correctly identified words are highlighted in the sentence. If two incorrect choices are made, the computer again displays the clues. The program will not continue until student responds correctly. Summary given after each run of 10 sentences (20 sentences in Verbs-Action). Contents: Nouns 1 and 2, adjectives, Verbs Being, Verbs Action, Verbs Helpers 1 and 2. Commodore 64 sets also include: Verb Selection, Verb Review, Plurals and Usage.

PARTS OF SPEECH I

DISKETTE ■■■[I][J]■■■

Complete Series (4 Sets) Commodore 64 Diskette..$119.80

The objective of this program is to provide practice in recognizing the part of speech of a given word. The name of a part of speech appears in the box. The student decides if the word beside the "eater" is used as that part of speech. Game-like setting; 10 lessons per program; words incorrectly identified are listed at the end of the lesson. Teacher's guide.

PARTS OF SPEECH I: Grade 3 (Nouns/Verbs)
PARTS OF SPEECH I: Grade 4 (Nouns/Verbs in Context)
PARTS OF SPEECH I: Grade 5 (Nouns/Verbs/Adverbs in Context)
PARTS OF SPEECH I: Grade 6 (Nouns/Verbs/Adjectives/Adverbs in Context)

(Each title, 1 Commodore 64 Diskette, 64K.....$29.95)

PUNCTUATION AND CAPITALIZATION, Grades 1-8: Series

DISKETTE ■■[P][I][J]■■■

Complete Series (6 Sets; 6 Diskettes).....$174.95

User-oriented programs enable students to edit sentences to correct errors in punctuation and capitalization. No typing skill is required. Changes are made by selecting changes from a menu of choices. **Features:** Carefully graded sequence of skills; 10 lessons per grade level; Covers skills included in most standardized tests; Complete user control; Automatic error checking; Self-scoring -- immediate feedback upon lesson completion; Examples given -- easy to use. Teacher's guide. A Micro School Program from Bertamax, Inc.

PUNCTUATION AND CAPITALIZATION, Grades 1-3
PUNCTUATION AND CAPITALIZATION, Grade 4
PUNCTUATION AND CAPITALIZATION, Grade 5
PUNCTUATION AND CAPITALIZATION, Grade 6
PUNCTUATION AND CAPITALIZATION, Grade 7
PUNCTUATION AND CAPITALIZATION, Grade 8

(Each title, 1 Commodore 64 Diskette, 64K.....$34.95)

READER RABBIT AND THE FABULOUS WORD FACTORY®

DISKETTE ■[E][P]■■■■■

1 Commodore 64 Diskette, 64K.....$39.95

A completely new approach to teaching pre-reading and early reading skills to tots. Children learn the essentials for reading. A playful, mischievous character in a bustling factory will inspire children to begin reading almost overnight. Teacher's notes.

Reader Rabbit is a trademark of The Learning Company.

® The Learning Co. All rights reserved. The Learning Co. and all product names are trademarks of The Learning Co.

READING COMPREHENSION: WHAT'S DIFFERENT?

DISKETTE ■■■[I][J]■■■

1 Commodore 64 Diskette, 64K.....$24.95

"Performance: Flawless." **Courseware Report Card, Sept 1982.**

Select the word that doesn't belong in the series. Analytical skill and reading comprehension are the keys to mastering the challenge. Course contains a total of 200 exercises. Requires joystick. Teacher's guide.

READING DISCRIMINATION

DISKETTE or CASSETTE ■■[P]■■■■■

1 Pet Diskette, 32K; Backup.....$35.00
1 Pet Cassette, 16K; Backup.....$35.00
1 Commodore 64 Diskette, 64K; Backup.....$35.00
1 Commodore 64 Cassette, 64K; Backup.....$35.00

Student must determine which of the four items listed is not like the other. If an incorrect response is given, an explanation is offered by the computer explaining why the response is incorrect.

RETURN OF HERACLES

DISKETTE ■■■[I][J][H]■■

1 Commodore 64 Diskette, 64K.....$32.95

"The graphics, sound, playability, and the amount of research into Greek mythology that went into this game are top notch." **Analog Computing.**

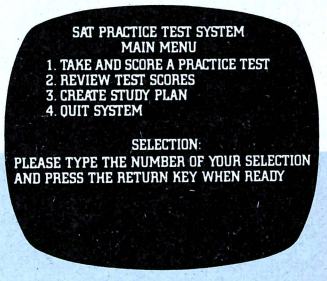
A role playing game. One or more players controls up to 19 heroes and heroines using joysticks or keyboard. Learn about Greek mythology while attempting to complete the twelve difficult and dangerous tasks assigned by Zeus.

REMEMBER (Memory Skills)

DISKETTE ■■■■[J][H]■■

1 Commodore 64 Diskette, 64K.....$79.95

A powerful learning tool that every student from junior high through adult needs for studying and remembering facts, lists, sequences, and relationships. Powerful, yet easy to use. Promotes long-term retention required in a wide variety of subjects, including history, English, foreign languages, chemistry, biology, physics and other academic and non-academic subjects. Add whatever subject matter you need to study and, with the help of built-in instructions and tools for improving recall, you can practice and test yourself until you remember it all. Teacher's guide.



SAT AND STANDARDIZED TEST PREPARATION

ACT/SAT REVIEW

DISKETTES *JH*

Complete Series (2 Sets; 4 Diskettes).....$129.95

Helps prepare students for the ACT and/or the SAT College Entrance Examinations. This package is designed to teach the material covered in the exams; it is not simply a set of practice tests. **Features:** three double-sided diskettes; more than 25,000 practice questions for each test; includes sections on "How to Take Exams" and "Test Strategies"; attractive, multi-colored screens and graphics making learning enjoyable; instruction mode explains both correct and incorrect answers -- explanations as to why other choices are wrong are also included; number correct and percentages appear on the screen and printer. Teacher's guide each set.

ACT REVIEW

2 Commodore 64 Diskettes, 64K.....$69.95

Includes: English Usage; Math Usage (Basic Mathematics, Algebra, Geometry, Problem Solving); Social Studies (U.S. History, World Civilization, Economics, Political Science, Sociology and Psychology); Natural Sciences (Biology, Chemistry, Physics, Astronomy and Earth Science); Reading Comprehension.

SAT REVIEW

2 Commodore 64 Diskettes, 64K.....$69.95

Includes: English Usage (Sentence Completion, Antonyms, Analogies, Reading Comprehension); Math Usage (Basic Mathematics, Algebra, Geometry, Problem Solving, Quantitatived Comparisons); Test of Standard Written English (Usage, Sentence Correction).

COMPUTER SAT

DISKETTE *JH*

2 Commodore 64 Diskettes, 64K; Book.....$79.95

Here is the SAT preparatory course that can significantly raise actual test scores. And what's more - It's Fun! Combines test-taking with diagnosis of results, prescription for improvement, and drill exercises for increased learning and speed. Includes detailed diagnostic appraisal of student performance in all test areas. Provides a section-by-section individualized study plan custom tailored to each student's needs. 540 drill items and 1000 electronic vocabulary flash cards provide immediate feedback and overall score. Presents successful strategies and builds general test-taking skills. Each student controls the rate at which all material is presented. Progress directly correlated to the student's own ability. Slow learner does not fall behind and the advanced student can quickly leave those parts of the exam that are "too easy". Provides a series of explanatory strategies which not only explain a specific answer but develop general test-taking skills that insure future success. When students complete this program they will be totally prepared for the examination that lies ahead. They know what type of questions to expect and the proven strategies for answering them. They've had valuable practice that has significantly raised their level of performance. These students have developed the necessary test-taking skills that lead to a sense of calm and confidence on the day of the actual SAT. Includes a 470 page manual "How to Prepare for the SAT" and a User's Manual.

COMPUTER SAT STUDY PROGRAM

DISKETTE *JH*

3 Commodore 64 Diskettes, 64K; 3 Books.....$89.95

The Barron's SAT preparation program from "the people who wrote the book". Includes 3 books, the main volume, a mathematics workbook and a verbal workbook plus a user's manual. The software program is interactive with the books. The student reads the question/problem in the book and indicates on the computer, the letter of the answer. The Sample Test program gives the correct answer, a complete explanation of the correct answer, explanations of wrong answer choices (for verbal questions), problem-solving strategies (for math quesitons) and a hint and a second chance to correct a wrong answer. The Test Mode is automatically timed just as on the actual SAT. Complete problem solving support. User's guide.

LOVEJOY'S PREPARATION FOR THE SAT

DISKETTE *JH*

2 Commodore 64 Diskettes, 64K; Book.....$69.95

Provides comprehensive preparation for the SAT and the most up-to-date guide to college admissions, both from America's most trusted name in high-school guidance counseling. Includes: Two practice exams designed to accurately simulate the real SAT; 27 separate practice modules, on everything from analogies to trigonometry; Extensive help screens, including an on-screen "scratch pad" and four-function calculator; Utility program which both calculates projected SAT scores and creates bar-graphs of scores and progress; Over 120 pages of tips and strategies for taking the SAT; and An easy-to-use review format which shows the student both wrong and right answers...and why the correct answer is correct. Includes a pocket edition of *Lovejoy's College Concise Guide.*

PERFECT SCORE: COMPUTER PREPARATION FOR THE SAT

DISKETTE *JH*

6 Commodore 64 Diskettes, 64K.....$69.95

Flexible, self-paced and interesting preparation for the SAT and PSAT. Covers 11 subject areas. Written by educators. Field-tested. Includes both testing and learning modes, Sample tests and Practice tests, continuous on-screen clock, manual with test taking strategies and print-out capabilities. Teacher's guide.

SAT SCORE IMPROVEMENT SERIES

DISKETTE *JH*

Complete Series (3 Sets; 7 Diskettes).....$99.95

An effective tool to begin your preparation for the Scholastic Aptitude Tests. Easy to operate so that you can concentrate on the content. All of the information you need to complete examples or answer test questions appear on screen, as do instructions for moving from one part of the program to another. Includes simulated SAT exams and complete reviews of each subject covered by the Verbal and Mathematical sections timed and formatted according to the latest SAT and scored on the SAT scale.

SAT SCORE IMPROVEMENT: SAMPLE TEST

2 Commodore 64 Diskettes, 64K.....$19.95

Analysis of the SAT - organization and scoring of the actual SAT plus test taking strategies and tips for raising one's score. **Pre-test** - diagnostic-prescriptive tool for determining strengths and weaknesses. Two-hour test consisting of the same mix of Math and Verbal questions as an actual SAT. **Sample Tests** - Two hour exams with complete Math and Verbal sections timed and formatted according to the latest SAT and scored on the SAT scale.

SAT SCORE IMPROVEMENT: VERBAL

2 Commodore 64 Diskettes, 64K.....$39.95

Vocabulary - provides a thorough review of antonyms, analogies, and sentence completions. **Reading Comprehension** - offers strategies and practice in reading passages and responding to questions about the material just read.

SAT SCORE IMPROVEMENT: MATH

3 Commodore 64 Diskettes, 64K.....$39.95

Algebra - provides instruction and practice involving the entire range of algebra problems found on the SAT: linear and literal equations, systems of linear equations, quadratic and radical equations, and reducing fractions. **Geometry** - provides instruction and practice in solving problems involving angle sums, equality of angles and sides of triangles, parallel lines, angles of a circle, the Pythagorean Thereom, special triangles, perimeters, areas and volumes. **Quantitative Comparisons and Word Problems** - covers all the remaining subjects in the Mathematical section of the SAT.

READING FUN WITH CHARLIE BROWN AND SNOOPY

DISKETTE P I

CHARLIE BROWN'S ABC'S
1 Commodore 64 Diskette, 64K.....$39.95
Ages 3-7. Young children will enjoy exploring the alphabet with Charlie Brown, Snoopy, Lucy and all their friends. Uses delightful animation to introduce children to letters and words. Shows both upper and lower case letters. Contains life-like animated sequences. User's guide.

SNOOPY'S READING MACHINE
1 Commodore 64 Diskette, 64K.....$39.95
Ages 4-8. Designed for children who know the alphabet and are ready to learn how letters are the building blocks of words. The Peanuts® gang makes learning about word families fun. When a child adds the letter B to AT, Charlie Brown appears and swings his BAT. Add C to AT and Snoopy chases a CAT. Add J to IG and Snoopy dances and dances. Teaches five word families: et, ig, op, ug; 25 different words to create. User's guide.

SNOOPY'S SKYWRITER SCRAMBLER
1 Commodore 64 Diskette, 64K.....$39.95
Ages 8-adult. An exciting game that tests your wits and skill with words. The goal is to make as many words as you can from the letters in Snoopy's challenge word. Over 40 different challenge words, or design games by entering your own words. User's guide.
PEANUTS Characters® 1950, 1952, 1958, 1960, 1965, 1968, 1971. United Feature Syndicate, Inc.

SENTENCE PATTERNS

DISKETTE or CASSETTE I
1 Commodore 64 Diskette, 64K.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95
Drill for intermediate students in identifying phrases within various sentence patterns. A randomly generated sentence is displayed, with a number underneath each word. The student is asked to type in the numbers of the words which make up the noun phrase (or verb phrase, adjective phrase, etc.). The program will not progress until a correct response is given. A summary is given after each run of 10 sentences. Includes: noun-verb patterns; noun-verb-noun patterns; noun-linking verb-noun patterns; and noun-linking verb-adjective patterns.

SHOW DIRECTOR

DISKETTE P I
1 Commodore 64 Diskette, 64K.....$34.95
May be used to encourage students' creative writing skills. Students are able to create and direct their own computer shows for many subject areas. They add the excitement with colorful pictures, animation, text, music and sound effects. High-resolution graphis; 12 backgrounds and 40 characters; lively music and sound effects. Encourages imaginative thinking and builds composition and editing skills. User's guide.

SPEED READER II

DISKETTE I J H
2 Commodore 64 Diskettes, 64K.....$69.95
"...an entertaining, self-paced program...(for) anyone who wants to increase their reading speed." **Interface Age, Oct 1982.** *Learning Software Awards 1982.*
Designed by reading specialists and tested on thousands of students. Challenging lessons and exercises designed to replace poor reading habits with good ones, sharpen perception, increase eye span, and correct sluggish eye movement. A complete reading development course which also measures your reading rate in words per minute with computerized reading tests; provides 35 interesting reading selections with quizzes to check comprehension; contains an easy-to-use editor for entering additional material; and determines reading level with a grade level analyzer. Can help double reading speed and increase comprehension. Teacher's guide.

Data Disks with additional reading selections. You must have Speed Reader II to use these disks.

SPEED READER II DATA DISK, Upper Elementary.$19.95
SPEED READER II DATA DISK, Intermediate.....$19.95
SPEED READER II DATA DISK, High School.....$19.95
SPEED READER II DATA DISK, College/Adult.....$19.95

SPEEDREAD PLUS

DISKETTE J H C A
2 Commodore 64 Diskettes, 64K.....$64.95
Uses time-proven techniques to train you to instantly recognize words and phrases. Exercises your peripheral vision, improves your eye movement and timing, and generally works with you at your pace. Offers four modes for reading text: single phrase for developing phrase recognition at high reading speeds; double phrase for developing eye movement and timing; random phrase for developing peripheral vision; and column phrase for training the eyes to read narrow text as found in newspapers and magazines with one-stop-per line. Allows selection of any combination of phrase widths and speeds with each of the four modes. Three classic texts provided for speed reading exercises: *Outcasts of Poker Flat* (Bret Harte); *Rip Van Winkle* (Irving); *Legend of Sleepy Hollow* (Irving). Other text can be entered as well as exam questions and answers to test comprehension. Teacher's guide.

SPELLDIVER

DISKETTE I
1 Commodore 64 Diskette, 64K.....$29.95
Deep beneath the sea lie giant words covered by a strange seaweed called lettermoss. Players face ferocious sharks and pesky flipper-nippers as they try to remove the lettermoss and decipher the words. A fun way to teach spelling. Guide.

SPELLING GAMES

DISKETTE P I J H

SPELLAGRAPH
1 Commodore 64 Diskette, 64K.....$39.95
The challenge of figuring out rebuses (word/picture puzzles) adds excitement to spelling practice. Comes with over 400 words from grade 2-8. Spelling activity is based on the self-corrected test. Each word comes with a context sentence. Create your own word lists and sentences. Multiple skill levels. Teacher's notes.

SPELLAKAZAM
1 Commodore 64 Diskette, 64K.....$29.95
Race the magician and release hidden animals. Colorful, lively animation and sound effects. Over 400 words. You can create your own word lists and sentences. Each word comes with a context sentence. Divided into grade levels 2-8. Multiple skill levels provide increasing challenge. Teacher's notes.

SPELLICOPTER
1 Commodore 64 Diskette, 64K.....$39.95
Discover secret words with an action spelling game of 400 words in 40 lists. From grade 1-adult. Provides a context clue with each word. Students gain points for spelling words correctly and lose points for misspelling. You can create your own word lists and clues. Perfect for spelling lessons, or making quiz games from classroom content. Lively sound effects and animation. Teacher's notes.

SPELLING IMPROVEMENT GAMES

DISKETTE P I J
1 Commodore 64 Diskette, 64K.....$34.95
These user-friendly games offer students a variety of ways to improve spelling. Words are chosen at random from lists of at least 50 words; clear instructions permit the teacher to modify the list of words. Players have the option of asking for hints when they need help. Correct answers are rewarded. Content: Speedspell, Hangman, Bumper Plurals.

SPELLING SERIES

DISKETTE P I J
Complete Series (7 Sets; 7 Diskettes).....$279.65
Multi-grade level spelling program based on the test/teach/test format. A pre-test determines which words need to be learned. Learning activities follow the pre-test. A post-test checks spelling and comprehension. Includes 4,000 commonly used words. Teachers may also enter their own word lists. User's guide with each set.

SPELLING GRADE 2
SPELLING GRADE 3
SPELLING GRADE 4
SPELLING GRADE 5
SPELLING GRADE 6
SPELLING GRADE 7
SPELLING GRADE 8

(Each title, 1 Commodore 64 Diskette, 64K.....$39.95)

SPELLING WITH MANAGEMENT

DISKETTE P I
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides drill in spelling, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program, and includes a student management system. Two hundred words are permanently stored on the disk, and teachers may enter up to five lists of 20 words each. Teachers choose the group of words to be used and the number of words to be presented in each run. Exercises include: Filling in missing letters of words; Selecting the correct spelling from 3 choices; Unscrambling the Spelling words. Teacher's guide.

SPIN-A-MATCH SPELLING

DISKETTE I
1 Commodore 64 Diskette, 64K.....$39.95
Requires both strategy and application of basic skills. Students move on the game board in such a way as to give themselves the best chance to spell words by joining two sets of letters. A specially programmed spinner on the computer screen determines the number of spaces a player moves. Includes spelling words with: consonant blends, digraphs and dipthongs, silent letter, variant vowel sounds. Teacher's guide.

S E P I J H C A **LEVELS**
S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

STEPS TO SPELLING BREAKTHROUGH SERIES

DISKETTE P I J
Complete Series (3 Sets; 6 Diskettes).....$288.00
Unique four-level spelling skills program that is ideal for elementary and secondary students who need remedial help. Words are chosen from the *New Iowa Spelling Scales* and *Arthur Gates' Spelling Difficulties in 3,876 Words.* Students will be challenged by context exercises, word games and puzzles, and drill and practice as they learn to overcome and spell difficult words correctly. Teacher's guide.

STEPS TO SPELLING BREAKTHROUGH 1
Concentrates on words misspelled by 50% of students in grades 2, 3, 4.

STEPS TO SPELLING BREAKTHROUGH 2
Words misspelled by 50% of students in grades 5, 6.

STEPS TO SPELLING BREAKTHROUGH 3
Difficult words misspelled by 50% of students in grades 7, 8.
(Each title, 2 Commodore 64 Diskettes, 64K.....$96.00)

STICKYBEAR READINESS

DISKETTE E P
"...the Golden books of Computerdom." **Softalk, May 1983.**
"...combines the highest quality programming with sound educational theory..." **Creative Computing, Oct 1983.**
Learning Computer Software Award, 1984.

STICKYBEAR ABC
1 Commodore 64 Diskette.....$29.95
Animated pictures representing each letter in the alphabet are shown. For ages 3-6. Instruction guide.

STICKYBEAR OPPOSITES
1 Commodore 64 Diskette.....$29.95
Big, colorful, animated pictures – featuring Stickybear with unicycles, hot air balloons, bean plants, cars, and more teach beginning learners about opposites. Up/down, full/empty, in front/behind, more. For ages 3-6. Instruction guide.

STORY MIX SERIES

DISKETTE P
Complete Series (6 Sets; 6 Diskettes).....$125.00
For beginning readers. Students compose their story by selecting story parts from a menu of four choices. Each story part is a meaningful phrase. Stories are composed by choosing answers to such questions as who, what and why. As each choice is made a picture is displayed. A portion of the story is given below the picture. Each story part is a chunk of meaning which enhances understanding and retention. Each program in the series focuses on a different theme. Teacher's guide. A Micro School Program from Bertamax, Inc.

STORY MIX 1
STORY MIX 2 (At the Zoo)
STORY MIX 3 (Nursery Mix)
STORY MIX 4 (Animal Mix)
STORY MIX 5 (Going Places)
STORY MIX 6 (In and Out)

(Each title, 1 Commodore 64 Diskette, 64K.....24.95)

SUPER SPELLING

DISKETTE or CASSETTE P I
1 Pet Diskette, 16K; Backup.....$124.95
5 Pet Cassettes, 16K.....$124.95
1 Commodore 64 Diskette, 64K; Backup.....$124.95
5 Commodore 64 Cassettes, 64K.....$124.95
Five programs use high-interest graphics, tutorials, game formats and timed drills to challenge good spellers and motivate poor ones. Teachers can program their own word lists, tailoring them to changing classroom needs. Programs provide unique and enjoyable tools for reinforcing essential spelling skills. Each program below is sold separately. Teacher's guide each title.

Scramble Letters - Students work individually or compete against one another as they attempt to unscramble teacher-selected words in a given amount of time. Computer gives tutorial help if word is not unscrambled in allotted time.

Super Scramble Spell - Individual work or competition as students try to unscramble words before they reach the bottom of the screen. First letters are underlined. No tutorial help.

Spell - Stores teacher-selected words and flashes individual words to students in timed displays. Students must then spell each word correctly. Display times can be varied.

Tic-Tac-Toe Spell - Generates spelling practice in a tic-tac-toe game format. Two students compete against each other as they match spelling skills for up to 100 teacher-selected words.

Rocket Spell - Students make an animated rocket appear and blast off as they guess the letters of "hidden words". Eight wrong guesses prevents the launch. Displays eliminated letters alongside the launching pad.

STORY MAKER

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$34.95

This program is unique - a creative story construction kit. A zany character guides children through all the steps necessary to create their title, name their character, write sentences with the built-in word processor, and create their own original illustrations. The story and graphics are then computer integrated and can be saved on an independent disk, complete with title and author's name. No limit to compositions (poems, graphs, class assignments, graphic illustrations) which can be created. Guide.

TOPICS IN ENGLISH

ALPHABETIZE/DICTIONARY *PIJ*

5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
3 Commodore 64 Cassettes, 64K.....$29.95

Tutorail help provided. **ABC's** - practice in supplying the missing letter in a sequence of consecutive letters or matching upper case letters to the displayed lower case letters. **Alphabetize** - three levels of difficulty for practice in alphabetizing word list. **Dictionary Use** - two levels of difficulty in learning dictionary skills.

LIBRARY SKILLS *IJH*

1 Commodore 64 Diskette, 64K.....$19.95
2 Commodore 64 Cassettes, 64K.....$19.95

Bookshelf - Three levels of difficulty in correctly shelving library books. Tutorial help provided. **Card Catalog** - Practice in use of the card catalog.

WORD STUDY *IJ*

1 Commodore 64 Diskette, 64K.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95

Antonyms and Synonyms - 2 concentration type games for matching antonyms and synonyms. **End-It** - Practice in adding endings to root words. **Homophones** - Practice in using homophones. **Phonograms** - Complete the list of words ending in the same letters by adding one or two letters.

WORDRIDER *PI*

1 Commodore 64 Diskette, 64K.....$39.95

Users must overcome obstacles by combining nouns and adjectives to build fanciful animated vehicles – Climbing Egg-Catchers, Flying Water Squirters, Bouncing Hole-Makers, and more -- and then maneuver those vehicles through some of the funniest perils yet found...from the geysers of Yellowyolk National Park to the streets of New Yolk City. Adventure and strategy game that builds vocabulary skills. User's guide.

VOCABULARY IMPROVEMENT GAMES

DISKETTE P I J

1 Commodore 64 Diskette, 64K.....$34.95

These user-friendly games offer students a variety of ways to build vocabulary. Words are chosen at random from lists of at least 50 words; clear instructions permit the teacher to modify the list of words. Players have the option of asking for hints when they need help. Correct answers are rewarded. Contents: Scramble, Ant-Syn-Hom. Teacher's guide.

VOWELS

DISKETTE or CASSETTE P I

1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 16K.....$49.95

Five programs with graphics for additional motivation, provide practice in recognizing and matching vowel sounds. separate programs give practice for A, E, I, O, U. Help levels for incorrect answers. Teacher's guide.

WATCH YOUR LANGUAGE

DISKETTE I J

1 Commodore 64 Diskette, 64K; 6 programs.....$149.00

These programs present a brief tutorial and extensive drill on the various parts of speech: nouns, adjectives, verbs, adverbs and prepositions. Each program includes a definition of the part of speech, instruction on its use and recognition in a sentence. Third, a sentence is presented and the student is asked to type a list of all the words in the sentence that are used as the part of speech being studied. Teacher's guide.

Each title contains 1 Commodore 64 Diskette, 64K.

Person, Place or Thing (Nouns).....$30.00
Tell Me About It (Adjectives).....$30.00
Lights, Camera, Action (Verbs).....$30.00
Where, When, How and Why (Adverbs).....$30.00
I Have a Preposition for You (Prepositions).....$30.00
What Part Do You Play.....$25.00

To be used after mastering previous sets. Drills students on nouns, adjectives, verbs, adverbs and prepositions in sentence context. A sentence is presented followed by one of the words in the sentence. Student must identify which part of speech that word is.

WEBSTER: THE WORD GAME

DISKETTE or CARTRIDGE E P

1 Commodore 64 Diskette, 64K.....$29.95
1 Commodore 64 Cartridge.....$29.95

Fast-paced, easy-to-play game. Players guess a word from which key letters have been deleted before the word disappears from sight. Helps students recognize word patterns and practice letter sequencing skills. Multiple levels. Guide.

WORD ASSOCIATION GAMES

DISKETTE P I J

THWART: A WORD BUILDING GAME

1 Commodore 64 Diskette, 64K.....$39.95

A word association game that challenges students wits and stretches their vocabulary. Simply pick a category and try to think of as many words as possible that fit the category. The words intersect like a crossword puzzle, until time and wits run out. Contains twelve word categories or allows teachers to design new games by entering their own words. Strengthens word association and recognition. Teacher's guide.

WORD WALK

1 Commodore 64 Diskette, 64K.....$39.95

Want to be a word detective? Your ability to decipher clues can make you a winner in this challenging word game. The clues hint at a secret word. Guess this word and scoot across the gameboard. But you'll have to think quickly and beat your opponent to the draw. Four skill levels. Teachers may design new games by entering their own words, making it adaptable to any curriculum. Teacher's guide.

WORD ATTACK

DISKETTE I J H

2 Commodore 64 Diskettes, 64K.....$49.95

"...well-designed, highly interactive vocabulary drill provides good reinforcement, encouraging student to learn word meanings, parts of speech, and spelling." **EPIE, May 1983.**

A four-part vocabulary building system that makes learning new words interesting and fun. Contains 675 new words with meanings and sentences illustrating usage, as well as an easy-to-use, versatile editor which allows you to add your own word lists. Words are presented on 9 different levels for students age 8 through adult. College-bound students will find it an especially effective way to gain points on the SATs. Students select from a variety of exercises: word display; multiple-choice quiz; sentence completion; or word attack, a fast action arcade game. All are educationally well-designed and graphically appealing to maximize learning and minimize drudgery. Classroom tested. 44-page user's guide.

Data Disks with additional words. Must have Word Attack to use.

WORD ATTACK DATA DISK, Grades 4 and 5.....$19.95
WORD ATTACK DATA DISK, Grades 6 and 7.....$19.95
WORD ATTACK DATA DISK, Grades 8 and 9.....$19.95
WORD ATTACK DATA DISK, SAT.....$19.95

WORD SPINNER

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$34.95

Reading becomes like a ride in an amusement park as children spin through the alphabet and learn to read. With brilliant colors and a whirling word spinner the building blocks of reading are made easy. Teacher's notes.

WORDS ARE FUN, Set 1

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$129.00

"...builds vocabulary and reading skills with style, grace and charisma." **80 Microcomputing.**

Helps develop awareness of spelling patterns. Grades 2-4. **Wordmaster** - Phonograms exercises. Variety of exercises with each of 12 common word families. Student may select a particular phonogram with which to work or may choose to be given a random selection by the computer. **Spellcaster** - Practice with a spelling list of the teacher's choice. Actually 2 programs: SPELL-BUILDER allows the teacher to build data files containing weekly spelling lists; SPELLCASTER reads those files and uses them in various exercises. Options include: List all the words; Flash words; Guess the missing letter; Patterns; Hangman. **Reword** - Rearrange one word into another. Uses 3-letter and 4-letter words. The word is presented on the screen; the student must change it to form a different word by rearranging its letters. **Snerd** - Creative writing. Students "construct a creature" by providing descriptive phrases in response to prompts on the screen. The phrases are inserted into a short "story" and students are encouraged to draw pictures of their creation. **Words in Words** - Recognition of spelling patterns. Students must identify which of four 4-letter words cannot be made from the letters in a longer word. Draws attention to the use of specific letters in the spelling of the words. Teacher's guide.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

MATHEMATICS

ALGEBRA ARCADE

DISKETTE J H

1 Commodore 64 Diskette, 64K; Book.....$49.95

An exciting game for learning and practicing Algebra at many different levels of difficulty. You create graphs that zap Alge-broids thereby increasing your score. A complete rules and instruction booklet tells you how to get started and offers tips on strategy and winning equations. Students like this one!

ALGEBRA: BASIC SKILLS

DISKETTE or CASSETTE J H

Complete Series (7 Sets), Commodore 64 Diskette.$185.00

Also Available: Individual titles for Pet Diskette and Cassette, Commodore 64 Cassette. See listing below for prices.

"...requires students to think independently as they interact with the tutorial program..." **booklist, May 1, 1984.**

Excellent programs that go beyond drill and practice. Randomly generated exercises for each concept. The student uses the screen as a worksheet, solving the equation step-by-step. After each step the equation is updated. Student moves at his or her own pace. All errors are immediately flagged and explained. Complete error analysis after each set of problems. Extremely well designed and implemented. Teacher's guide with each set.

EQUATIONS I

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

"This is an excellent program...I recommend the purchase of this product." **School Microwave Review, Summer 1982.** *"...easily used by people with limited computer knowledge."* **Minn. Dept. of Education High Quality Courseware List.**

Randomly generated equations in the form AX+B=C, where A, B, C are integers. All solutions are integer values. All errors immediately flagged and explained.

EQUATIONS II

1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

Generates linear equations in the form of AX+B=CX where A, B, C and D are integers. Helpful feedback throughout the program.

SOLVING QUADRATIC EQUATIONS

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

"...Simple and clear and will provide good reinforcement for students who need to develop skills in factoring quadratic equations. This is a program that does what it sets out to do." **Media Review, Feb, 1983.**

Generates random quadratic equations in the form AX2+BX+C=0 that are solvable by factoring. Detailed help given as needed.

BINOMIAL MULTIPLICATION

1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

"...excellent method of drill and practice..." **Minn. Dept. of Education High Quality Courseware List."**

Provides practice in multiplying two binomials, in the form (ax+b) (cx=d), where a,b,c, and d are integers. Tutorial help available as needed.

FACTORING ALGEBRAIC EXPRESSIONS

1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

"...format of this disk is one of the best I have seen." **Minn. Dept. of Education High Quality Courseware List.**

Algebraic linear and quadratic expressions that are factorable. Allows student to experiment on a trial and error basis until the correct solution is found. Help immediatley available as needed.

SIMULTANEOUS LINEAR EQUATIONS

1 Commodore 64 Diskette, 64K; Backup.....$29.95

"...impossible not to complete the solution, because the program provides help at every step." **Mathematics Teacher, April 1984.**

Generates random simultaneous linear equations that are solvable by addition or subtraction. After completion of the equation, the program shows a graphic representations of the solution allowing the student to see the connection between the algebraic and graphic solution.

GRAPHING LINEAR FUNCTIONS

1 Commodore 64 Diskette, 64K; Backup.....$29.95

"...an excellent piece of educational software. With its low price, it is highly recommended for every secondary mathematics classroom..." **Mathematics Teacher, May 1984.**

Practice in graphing linear functions in the form AX+BY=C, (or some other variation of the form). Graphics enhance student understanding.

ADDITION MAGICIAN
DISKETTE ■■[P]I■■■■

1 Commodore 64 Diskette, 64K.....$34.95

An absent-minded magician makes a game out of learning addition. Magical walls and secret prizes encourage flexible thinking about adding. Children become addition magicians! For ages 6-10. Teacher's notes.

ADVENTURES WITH FRACTIONS
DISKETTE ■■■[I][J]■■■

1 Commodore 64 Diskette, 64K; Backup.....$45.00

Students learn two methods of ordering unlike fractions in interactive tutorials incorporating graphics and animation. The common denominator approach and the cross-products method are both presented. In a lively game with color graphics and sound, students practice ordering fractions as they try to collect gold coins to ransom the young prince while encountering helpful and harmful monsters. A teacher option selects the difficulty level of the game. Support material includes a pretest, a post-test, worksheets, a practice puzzle, and a score sheet. Teacher's guide.

ARCADEMIC SKILL BUILDERS IN MATH
DISKETTE ■■[P][I][J]■■■

"This package of math games turns math drill into sheer pleasure for children." **InCider, May 1983.** *"...quick, imaginative and as alluring as any video game..."* **Electronic Learning, Oct. 1983.**

The fast action and colorful graphics of an arcade game format will motivate students of all ages to learn fundamental math skills. Provides practice and drill in the four basic math operations and combinations of operations. The program range of numbers can be changed to practice basic facts with the numbers 0-3, 0-6, 0-9. Each game has 9 different speeds; runs from 1-5 minutes; and can be controlled with either paddles or keyboard.

*** Each $34.00 set includes 1 Commodore 64 Diskette, 64K and a User's Guide.**

**** Each $44.00 set includes 1 Commodore 64 Diskette, 64K with Instruction Sheet; 12 Blackline Masters; Deck of full-color Flashcards; 16 page Teacher's Guide.**

ALIEN ADDITION.....*$34.00/$44.00**

MINUS MISSION.....*$34.00/$44.00**

METEOR MULTIPLICATION.....*$34.00/$44.00**

DEMOLITION DIVISION.....*$34.00/$44.00**

ALLIGATOR MIX.....*$34.00/$44.00**
Addition and Subtraction

DRAGON MIX.....*$34.00/$44.00**
Multiplication and division.

APPLIED MATH
(Survival Math)
DISKETTE ■■■■[J]■■■

1 Commodore 64 Diskette, 64K; Backup.....$55.00

"...presents a wide variety of challenging problems in realistic contexts. **Courseware Report Card, 1983.** *Noted as Exemplary Science and Mathematics Software. Recommended.* **Classroom Computer News, March 1983. Included in Minnesota State Department of Education High Quality Courseware List, 1984.**

Four simulations help students apply math skills to everyday life. Teaches the use of mathematics in practical decision-making and provides practice in calculating answers. **Travel Agent Contest** - students plan a budget for a trip. **Smart Shopper Marathon** - has students making price comparisons. **Hot Dog Stand** - students run a stand at school football games, making inventory and price decisions based on many variables. **Foreman's assistant** - students plan a playroom in a given time frame and budget. Teacher's guide.

AREA OF A RECTANGLE
DISKETTE or CASSETTE ■■■[I][J]■■■

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 16K.....$25.95

The concept of area is introduced, explained, and reinforced. Using graphics and counting, the program guides the studentfrom the concrete to the more abstract discovery of the algorithm for finding the area of a rectangle. The area may be found by either counting, adding, or multiplying, depending on the ability level of the student. Choice of instruction or practice. Continuous feedback.

ARITH-MAGIC I
DISKETTE or CASSETTE ■■[P]I■■■■

1 Pet Diskette, 16K.....$35.00
1 Pet Cassette, 16K.....$35.00
1 Commodore 64 Diskette, 64K.....$35.00
1 Commodore 64 Cassette, 16K.....$35.00

"...makes learning math fun...a good math tutor and offers programs of different levels of difficulty that will entertain anyone who enjoys math..." **Softalk, Dec 1981.**

Introduce youngsters to the magical world of mathematics. For grades 2-6. These game-like programs let kids have fun with basic mathematics and help them develop problem-solving skills. Games include: **Diffy** (Subtraction skills); **Tripuz (Add/subtract/multiply/divide); and Magic Squares.** Problems gradually become more difficult and a tutorial mode is provided to make sure that the student understands the theory behind the solutions. Excellent for accelerated learners. A Quality Educational Design program.

ARITHMETIC SKILLS
DISKETTE or CASSETTE ■■[P][I][J][H]■■

Complete Series (4 Sets; 4 Diskettes).....$149.80
Complete Series (4 Sets; 15 Cassettes).....$149.80
Practice in learning and understanding basic math concepts. Teacher's notes each set.

ADDITION AND SUBTRACTION CONCEPTS
1 Commodore 64 Diskette, 64K.....$39.95
4 Commodore 64 Cassettes, 64K.....$39.95
Practice for the understanding and learning of addition and subtraction concepts. Also includes tutorial and timed drill for supplying missing operands in number sentences with whole numbers.

MULTIPLICATION AND DIVISION CONCEPTS
1 Commodore 64 Diskette, 64K.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95
Practice for the understanding and learning of multiplication and division concepts.

MULTIPLICATION ALGORITHMS REVISED
1 Commodore 64 Diskette, 64K.....$39.95
4 Commodore 64 Cassettes, 64K.....$39.95
Multiplication of 1- and 2-digit numbers times 10, 100's, and 1,000's; 1- and 2-digit numbers times 2- and 3-digit numbers; 2- and 3-digit numbers by 10's and 100's; 2- or 3-digit numbers by 2-digit numbers.

DIVISION ALGORITHMS
1 Commodore 64 Diskette, 64K.....$19.95
2 Commodore 64 Cassettes, 64K.....$19.95
Practice in division with or without remainders; long division problems with or without remainders.

BALANCE
DISKETTE ■■■■[J][H]■■

1 Commodore 64 Diskette, 64K; Backup.....$49.00

Helps students visualize and better understand the process of solving equations. Linear equations are graphically displayed on a "balance beam". If the quantities on one side are equal to those on the other, the equation is balanced, and the beam remains horizontal. When quantities are unequal, however, the beam will tip in one direction or the other. A separate option allows the students to enter values of "X" continuously while observing the effects of the balance beam. Teacher's guide.

BUMBLE GAMES®
DISKETTE ■[E][P][I]■■■■

1 Commodore 64 Diskette, 64K.....$39.95

"...imaginiative and highly motivating...exceptionally creative and well-designed instructional programs that make outstanding use of color, graphics, and sound in a fanciful theme." Learning Computer Software Awards 1982. **Learning, Dec 1982.**

Six programs introduce a basic math skill: plotting number pairs. Guided by Bumble, an imaginary creature from the planet Furrin, the program demonstrates name- and number-matching in an array and points on a grid. Children need this skill to understand and build charts and graphs, to locate places on a map, and to design computer graphics. Color graphics; music and sound that can be turned on and off. Teacher's guide.

Bumble Games is the trademark of The Learning Company.

CHALLENGE MATH
DISKETTE ■■■[I][J]■■■

1 Commodore 64 Diskette, 64K; Backup.....$55.00

"...appealing and involving games...Recommended." **Booklist, Sept 1, 1983.** *Year's most worthy educational programs,* **Computer Software Roundup, Instructor, Nov/Dec 1983.**

Lively games with color graphics and sound help your students stretch their mathematical skills. Programs cover basic operations, decimals and fractions. A teacher option lets the instructor modify the levels of difficulty, making the programs ideal for both remedial students and those who are on grade level. Teacher's guide gives detailed instruction and provides suggestions for classroom use.

BASIC MATH MASTERY
DISKETTE or CASSETTE ■■■[I][J][H]■■

Theses are very well designed programs for practicing and mastering basic math operations. All problems are generated randomly. Different problems are presented each time a program is run. The computer screen simulates the work being done on paper, so no pencil and paper is needed. A cursor points to each position as an entry is needed. Student can follow the procedure easily. When an error is made, it is immediately flagged. Students may then enter another number or, when helpful, an explanation is shown on the screen. This way the student always knows exactly where s/he is and exactly where the error occurred. If a second error is made on a problem, the answer is shown, and the procedure continues. Teacher's guide.

ADDITION WITH CARRY
1 Pet Diskette, 16K; Backup.....$24.95
1 Pet Cassette, 8K.....$20.95
1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassette, 64K.....$20.95
Problems may be chosen with 1-9 addends from 1-9 columns wide.

SUBTRACTION PRACTICE
1 Pet Diskette, 16K; Backup.....$24.95
1 Pet Cassette, 16K.....$20.95
1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassette, 64K.....$20.95
Student selects problems with or without "borrowing"

1-2-3 DIGIT MULTIPLICATION
1 Pet Diskette, 16K; Backup.....$24.95
1 Pet Cassette, 8K.....$20.95
1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassette, 64K.....$20.95
Student multiplies 3 digit number by a 1, 2, or 3 digit number.

LONG DIVISION
1 Pet Diskette, 16K; Backup.....$24.95
1 Pet Cassette, 8K.....$20.95
1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassette, 64K.....$20.95
Student chooses either a 1, 2, or 3 digit divisor.

ADDING FRACTIONS
1 Pet Diskette, 32K; Backup.....$24.95
1 Pet Cassette, 16K.....$20.95
Practice adding fractions with unequal denominators. Errors flagged and explained.

MULTIPLYING FRACTIONS
1 Pet Diskette, 16K; Backup.....$24.95
1 Pet Cassette, 8K.....$20.95
Practice which helps students better understand the cancelling or reducing process. Errors immediatley flagged and explained.

CONSUMER MATH
DISKETTE ■■■■[J]■■■

1 Commodore 64 Diskette, 64K.....$35.00

Calculations relating to earning and purchasing. Includes: Calculating weekly or yearly earnings; Calculating overtime and holiday rates of pay; Calculating the price per ounce; Choosing the best buy.

DECIMAL OPERATIONS
DISKETTE ■■■[I][J]■■■

Complete Series (4 Sets; 4 Diskettes); Backup.....$90.00

"...very complete and useful tool that provides practice in basic operations with decimal numbers with careful attention to process." **Media Review, Fall 1984.**

A well-designed series in which the student is guided in step-by-step progression. Options are given as to number of problems and size of numbers. Students learn and use correct vertical placement of the problems using the computer screen as a worksheet. All errors are immediately flagged, and an error analysis is given after each problem and at the end of each set. Teacher's guide with each set.

ADDING DECIMALS
SUBTRACTING DECIMALS
MULTIPLYING DECIMALS
DIVIDING DECIMALS

(Each title, 1 Commodore 64 Diskette, 64K; Backup$24.95)

DECIMAL PROBLEMS
DISKETTE or CASSETTE ■■■[I][J]■■■

1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 16K.....$49.95

Decimal Conversion - A common division method of converting fractions to decimals is used by the computer to help the student learn this important technique. The student receives tutorial help in converting decimal numerals to common fractions. **Decimal Estimation** - Solving decimal estimation problems using rounding techniques. **Decimal Comparison** - Skill levels with tutorial help used to guide student in learning to find the smallest/largest of the given decimal numbers or to sort a set of given decimal numbers. **Decimal Rounding** - Options for various levels of difficulty and levels of help are provided in rounding decimal numbers. Teacher's guide.

DECIMALS: CONCEPTS AND OPERATIONS

DISKETTE or CASSETTE I J

1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 16K.....$49.95

Animated graphics are used to help the student learn the concepts of decimals. Help levels are provided whenever errors are made by the student. Emphasis on the placement of the decimal point is included. Graphic display of tenths and hundredths as they relate to decimal numerals is used. Algorithm for long division is used for division of decimals. Includes: Decimal Concept; Decimal Addition; Decimal Subtraction; Decimal Multiplication; Decimal Division. Teacher's guide.

DONALD DUCK'S PLAYGROUND: MONEY SKILLS

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95

For ages 7-11. Students learn about making change, logical thinking, categorization and matching skills while helping Donald Duck pay for and build a playground set for his nephews. User's guide.

ELEMENTARY MATH LOGIC

DISKETTE P I

1 Commodore 64 Diskette, 64K; Backup.....$44.00

Four educational games. **Bagels** is a game of logic where students use clues to guess a number selected by the computer. **Hurkle** can be used to teach coordinate systems, direction, and point location. **Number** is a game where students use clues to guess a number within a limited range. **Taxman** teaches about the factors of a number and prime numbers. Handout pages for student use are available in the teacher's guide.

ELEMENTARY MATH SERIES

DISKETTE or CASSETTE I J

Complete Series (2 Sets) Pet Diskette.....$95.00
Complete Series (2 Sets) Pet Cassette.....$95.00
Complete Series (2 Sets) Commodore Diskette.....$95.00
Complete Series (2 Sets) Commodore Cassette.....$95.00

ELEMENTARY MATH 1

1 Pet Diskette, 16K; Backup.....$45.00
1 Pet Cassette, 8K; Backup.....$45.00
1 Commodore 64 Diskette, 64K; Backup.....$45.00
1 Commodore 64 Cassette, 64K; Backup.....$45.00

Includes: **Place Value** - basic concepts; **Number Strings** - **addition practice; Math Drill** - all operations, user specifies type and number of problems; and **Speed Math Drill** - same as Math Drill, but with ten levels of speed.

ELEMENTARY MATH 2

1 Pet Diskette, 16K; Backup.....$50.00
1 Pet Cassette, 8K, Backup.....$50.00
1 Commodore 64 Diskette, 64K; Backup.....$50.00
1 Commodore 64 Cassette, 64K; Backup.....$50.00

Includes: **Decimals** - basic concepts and drills; **Fractions** - introduction and drill; **Bagels** - student tries to guess 3-digit number; **Stones** - number games; and **Factor** - student learns factors of numbers.

ESSENTIAL MATHEMATICS SERIES

DISKETTE P I J

Provides drill and practice on essential mathematical skills. While not a complete mathematics curriculum, the program is designed to enable the user to review and master the essential mathmatical skills necessary for more advanced work. **Features:** Highly motivational drill and practice with immediate reinforcement; Carefully graded sequence of skills; Extra activites at the end of many of the lessons; Teacher options for changing the length of lessons; Simple record keeping system; Early exit from the lesson if necessary. A Micro School Program from Bertamax, Inc.

ESSENTIAL MATHEMATICS, Grade 1: Operations

1 Commodore 64 Diskette, 64K.....$39.95

ESSENTIAL MATHEMATICS, Grade 2: Operations

1 Commodore 64 Diskette, 64K.....$39.95

ESSENTIAL MATHEMATICS, Grade 3: Operations

2 Commodore 64 Diskettes, 64K.....$65.95

ESSENTIAL MATHEMATICS, Grade 4: Operations

2 Commodore 64 Diskettes, 64K.....$69.95

ESSENTIAL MATHEMATICS, Grade 5: Operations

2 Commodore 64 Diskettes, 64K.....$79.95

ESSENTIAL MATHEMATICS, Grade 6: Operations

2 Commodore 64 Diskettes, 64K.....$79.95

FACTOR BLAST

DISKETTE I J

1 Commodore 64 Diskette, 64K.....$29.95

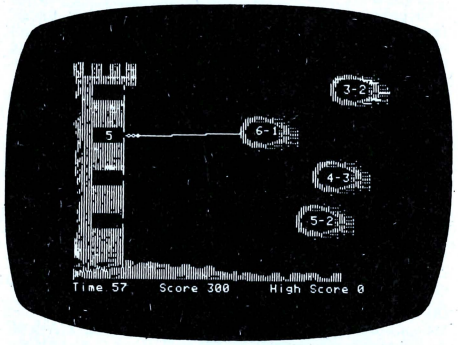
Animated graphics reinforce whole number factoring. Scores mount as each player takes a turn "blasting" the factors of a number chosen by the opponent. Three levels of difficulty. Option to play against the computer. Ages 10 and up. Teacher's guide.

FACTORING

DISKETTE or CASSETTE J H

1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95

Three levels of difficulty for developing skills in factoring: multiple-choice, fill in the missing term, or give the factors for a given expression. At each level of difficulty, sufficient help is provided for the student to obtain the correct answer whenever errors are made. Throughout the use of these tutorial programs, a summary of the student's progress is being tabulated and is displayed after the completion of a set of 10 problems. Contents: Factoring Trinomials; Factoring Perfect Square Trinomials; Factoring the Difference of Square; Factoring Trinomials with Common Nonomial Factors; Multiplying Binomials. Teacher's guide.



FACTS ARCADE GAMES

DISKETTE P I

Uses exciting arcade games to provide drill on basic number facts and includes a student management system as well. Each game has a choice of difficulty levels, five speed levels, and length of playing time (1 to 10 minutes). Points are scored for correct answers, with bonus points for completing a round with no mistakes. Points are lost for incorrect answers or giving no answer. Final scores are shown on the screen at the end of the game. Colorful, animated graphics throughout. Teacher's guide.

ADDITION CIRCUS

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Balloons containing addition fact problems float upward in the sky. A correct answer allows the clown to pop a balloon before it hits the circus tent.

SUBTRACTION DEFENDERS

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Cannonballs containing subtraction fact problems fly toward the castle wall. Students defend the castle by typing correct answers to shoot down the cannonballs.

MULTIPLICATION BRIGADE

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Multiplication problems appear in the windows of the burning building. Answering the problems correctly helps the bucket brigade put out the fire.

DIVISION SHOOTING GALLERY

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Ducks containing division fact problems move across the screen in a shooting gallery format. Correct answers allow the student to shoot down the ducks.

FAR STAR: ARCADE MATH

DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95

Greetings, co-pilot of Moon Eagle I. It's up to you to avoid and destroy the falling stars that threaten your ship. You'll have to keep a sharp eye for the Far Star, too. Blast it and score extra points. As you protect your spaceship, you must also solve a math challenge. Three answers appear in Outer Space. Your mission is to dock your ship with the right one. Destroy the wrong answers first and watch your score grow. Joystick required. User's guide.

FRACTION FACTORY

DISKETTE P I J

1 Commodore 64 Diskette, 64K.....$29.95

"...excellent introductory program...outstanding program for the primary grades." **InCider, Sept 1984.**

Colorful graphics and musical sounds help children see and understand fractions and fractional parts. Students learn to find equal values with different denominators, and are soon learning to add, subtract and multiply fractions. The graphics provide clear exapmles of what the numbers mean, and when children understand that, then fractions make sense.

FRACTION FEVER

CARTRIDGE P I J

1 Commodore 64 Cartridge.....$24.95

"...one of the finest examples I have seen of graphic and audio dispalys in educational programs." **InCider, Sept 1984.**

Combines a fast-paced arcade game with the educational value of a learning game. As you hop along on your pogo stick, you'll be searching for the picture-fraction that matches the fraction at the top of the screen. Spot the correct fraction and ride the Fraction Elevator up to higher floors. Eliminate incorrect fractions along the way and add to your point score. Requires joystick. User's guide.

FRACTIONS

DISKETTE or CASSETTE P I J

Complete Series (4 Sets; 4 Diskettes).....$209.80
Complete Series (4 Sets; 21 Cassettes).....$209.80

FRACTIONS: INTRODUCTION

1 Commodore 64 Diskette, 64K.....$39.95
4 Commodore 64 Cassettes, 64K.....$39.95

Provides practice in recognizing equal parts, halves, thirds, or fourths. Each is an option which may be selected at the beginning of the program. Ten problem summary provided.

FRACTIONS: EQUIVALENTS/COMPARING/REDUCING

1 Commodore 64 Diskette, 64K.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95

Students must compare two given fractions by typing in the < or = symbols. Also teaches fraction reduction with chart diagram. A ten problem summary is given. Help levels provided for incorrect answers. Practice in reducing a fraction to lowest terms, finding an equivalent fraction for a given fraction, determining the common denominator.

ADD AND SUBTRACT FRACTIONS

1 Commodore 64 Diskette, 64K.....$59.95
6 Commodore 64 Cassettes, 64K.....$59.95

Adding and subtracting fractions with like and unlike denominators, with or without reducing.

MIXED AND IMPROPER FRACTIONS REVISED

1 Commodore 64 Diskette, 64K.....$59.95
6 Commodore 64 Cassettes, 64K.....$59.95

Practice with mixed fractions and diagrams. Practice in changing improper fractions to mixed fractions and mixed fractions to improper fractions.

FRACTION OPERATIONS

DISKETTE or CASSETTE I J

Complete Series (4 Sets; 4 Diskettes).....$90.00
Complete Series (4 Sets; 4 Cassettes).....$80.00

Well designed programs. All work done on the screen. Exercises are randomly generated and all errors are immediately flagged and explained. Use of split screen provides work space and simultaneous instructions and/or error messages for optimum feedback. Teacher's guide.

ADDING FRACTIONS

1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassete, 64K.....$20.95

"...a useful addition to a software collection." **Mathematics Teacher, March 1983.**

Excellent practice in adding fractions with uncommon denominatiors.

SUBTRACTING MIXED FRACTIONS

1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassete, 64K.....$20.95

Problems are composed of positive mixed fractions less than 10.

MULTIPLYING FRACTIONS

1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassete, 64K.....$20.95

"The consistency and simplicity with which this program operates makes it a valuable resource to support a middle school or junior high school mathematics program." **Media Review, Feb. 1983.**

Practice in multiplying fractions and in cancelling or reducing.

DIVIDING FRACTIONS

1 Commodore 64 Diskette, 64K; Backup.....$24.95
1 Commodore 64 Cassete, 64K.....$20.95

Excellent practice in dividing fractions.

S E P I J H C A LEVELS

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

GATHERING SPEED SERIES
DISKETTE ■■■■J■■■

GATHERING SPEED, Set 1
1 Commodore 64 Diskette, 64K (5 Programs).....$169.00
Mathematical operations not found in standard drill programs.

Powers and Roots - Raising to a power, raising to a power and multiplying, raising to a power and adding or subtracting, and finding square roots from perfect squares.

Perimeters, Areas, and Volumes - Perimeters of rectangles and squares. Circumference of circles. Areas of rectangles, squares, parallelograms, triangles, and circles. Volumes of rectangular prisms, cubes, and cylinders. Graphic illustrations.

Factoring: Three Lessons - Finding any two factors, finding prime factors, finding prime factors using exponential notation.

Average - Finding the average of numbers in a set, given only the set of numbers; and solving word problems involving finding the average of a series of numbers.

Ratio and Proportion: Five Lessons - Writing a ratio as a fraction, word problems converting ratios to fractions, find the missing number in a proportion, finding the missing number using larger proportions, and word problems requiring the student to write and solve a proportion.
(Each title, 1 Commodore 64 Diskette, 64K.....$35.00)

GATHERING SPEED, Set 2
1 Commodore 64 Diskette, 64K (5 Programs).....$169.00
"...valuable practice in mathematical topics that relate to real-life needs...good reinforcement in the mathematics of money handling.""...bare bones drill program...deals with junior high subjects that are not often given CAI treatment." **Courseware Report Card 1983.**
Mathematical operations not found in standard drill programs.

Equivalents: Six Lessons - Conversion among fractions, decimals, and percents: rename fractions to decimals, decimals to fractions, percents to decimals, percents to fractions, decimals to percents, and fractions to percents.

Percents: Nine Lessons - Finding a percent of a number. Finding what percent one number is of another. Mixed problems and word problems.

Interest: Three Lessons - Finding the interest using the formula i=prt: where rate and time are whole numbers; rate is fractional, time is a whole number; rate is a whole number, time is fractional.

Discount, Sales Tax, Commission, and Installment Buying - Consumer math including: rounding to nearest cent; finding a percent and rounding to the nearest cent; calculating price of item including sales tas, amount of discount and sale price, amount of commission and total earnings, and installment buying costs.

Word Problems: Six Lessons - Word problems: dealing with whole numbers, fractions, and decimals. To accustom your students to working with word problems.
(Each title, 1 Commodore 64 Diskette, 64K.....$35.00)

GRABIT FACTORY
DISKETTE ■E P■■■■■

1 Commodore 64 Diskette, 64K.....$39.95
For youngsters learning to recognize numerals and beginning addition and subtraction. Using a joystick, child operates a crane in the Grabit Factory to pick up number blocks that match a computer-selected number or that correctly complete a simple equation such as 2 + 5.

GRAPHING
DISKETTE ■■■■J H■■

1 Commodore 64 Diskette, 64K; Backup.....$45.00
Designed for use in a variety of mathematics classes. In **Slope**, students are able to investiage relationships between linear equations by entering up to five equations and seeing their graphs plotted on the screen. Using **Polar**, students can examine polar coordinate equations and their graphs without tedious point-by-point plotting. **Polygraph** allows students to plot quadratic, conic, and other equations commonly used in algebra, trigonometry, analytical geometry, and physics. In the education game **Snark**, students develop strategies for locating a "snark" while they practice constructing circles on a coordinate system. **Radar** is a simulation in which students attempt to catch a runaway ship with a rescue boat. Students use angles of 0° to 359° to steer the rescue boat on a simulated radar screen. Teacher's guide.

GRAPHMASTER
DISKETTE ■■■■J H■■

1 Commodore 64 Diskette, 64K; Backup.....$49.00
Allows users to generate the graph of any cartesian or polar function, to overlay several graphs, to zoom in on points of particular interest, and to quickly approximate the integer of any function. Options allow users to experiment with variables. Can be used in either a simple or more involved mode. Ideal as a teacher utility for demonstrating properties of functions and graphing concepts in Trigonometry, pre-Calculus, and Calculus or as a discovery learning tool for Junior High and High School Algebra students. Teacher's guide.

GRAPHS: READING AND INTERPRETING
DISKETTE ■■■I■■■■

1 Commodore 64 Diskette, 64K.....$35.00
Reading and interpreting information from graphs. Including: Pictographs, Circle graphs, Bar graphs, Line graphs.

HIGH SCHOOL MATH
DISKETTE ■■■■■H■■

NOTE: This is also useful for advanced junior high students or for remedial study and review at the college level. Programs provide instruction and then generate randomized problems from a large bank of exercises. The student supplies the final answer. (Students may or may not need to use pencil and paper to do intermediate figuring.) Therefore, faster students need not go through every step of every problem before they can get to the answer, and slower students can work out answers at their own pace, seeing the figures on paper. Every incorrect problem is explained and all the intermediate steps are shown for the problems that are answered wrong. The computer keeps track of the number of problems attempted and the number correct. Attractive use of color and graphics makes the problems more enjoyable. Teacher's guide with each set.

HIGH SCHOOL BASIC MATH
1 Commodore 64 Diskette, 64K.....$29.95
Whole numbers, order of operations, decimals, fractions, percents, ratios and proportions.

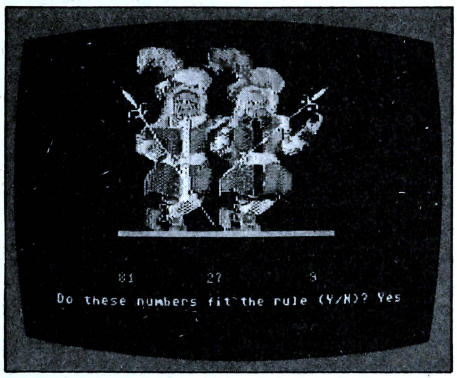
HIGH SCHOOL BASIC ALGEBRA
1 Commodore 64 Diskette, 64K.....$29.95
Integers, absolute value, rational numbers, polynomials, graphing inequalities on a number line, solving first degree equations and inequalities and algebraic fractions.

HIGH SCHOOL GEOMETRY
1 Commodore 64 Diskette, 64K.....$29.95
Types of angles, parallel and intersecting lines, polygons, perimeters, areas, volumes, circles and the Pythagorean Theorem.

HIGH SCHOOL INTERMEDIATE ALGEBRA
1 Commodore 64 Diskette, 64K.....$29.95
Exponents, radicals, solving quadratic equations, graphing lines, the distance formula, solving systems of equations, logarithms, and sequences.

HIGH SCHOOL PROBLEM SOLVING
1 Commodore 64 Diskette, 64K.....$29.95
Strictly designed to teach methods of solving "applications" or "story" problems. Integer problems, geometric problems, averages, age problems, distance problems, work problems, coin problems, mixture problems, permutations and combiantions.

HIGH SCHOOL CONSUMER MATH
1 Commodore 64 Diskette, 64K.....$29.95
Percentages, progressions, simple and compound interest, annuities, mortgages, taxes, history of measurement systems, and the metric system.



KING'S RULE: MATHEMATICS AND DISCOVERY
DISKETTE ■■■I J H■■

1 Commodore 64 Diskette, 64K; Backup.....$55.00
Introduces students to scientific thinking - generating and testing hypotheses. Players try to discover numerical rules that allow them to work their way through a king's castle. Each rule fits a set of three numbers - for example, 2-4-6. Builds skills in recognizing numerical patterns and relationships and solving problems.

MATH FACTS GAMES II
DISKETTE ■■■I J■■■

1 Commodore 64 Diskette, 64K.....$34.95
Fast action math fun. User plays against the computer or against another player. Two player games. Contents: Stop the Fact; Guide the Answer; Find the Answer; The Great Fact Race. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH BLASTER
DISKETTE ■■P I■■■■

2 Commodore 64 Diskettes, 64K.....$49.95
"...a big improvement on traditional drill-and-practice programs." **InfoWorld, Jan 11 1983.**
Contains over 600 problems in addition, subtraction, multiplication, division, fractions and percents as well as an easy-to-use versatile editor which allows you to add your own sets of facts. Excellent for math facts, both learning and drill, with a fun game to test skills. Helps students memorize math facts that are essential to building basic math skills, improve their accuracy, and increase their speed. The problems are grouped in "families of facts" and can be used with four different learning activities, including a fast-action arcade game. Classroom tested. 60-page user's guide.

MATH/LOGIC GAMES
DISKETTE ■■■I J H■■

1 Commodore 64 Diskette, 64K; Backup.....$49.00
A collection of math games designed to strengthen estimation, logic, and basic math skills. Each game may be played by one or more players. Includes: **Dr. Factor** - a study of factoring; **Even Wins** - inductive reasoning and basic math skills; **Crazy Dice** - players figure out the mathematical operation underlying a succession of graphically represented dice rolls; **Bubbles** - designed to improve estimation skills. Teacher's guide.

MATH MASTERY GRADES 1-8
DISKETTE ■■P I J■■■

Combines guided math drill, an arcade-style reward game, and a student management system. Each disk offers a choice of carefully selected difficulty levels from beginning to advanced. The computer leads students through the problems step by step checking each response in sequence. After three errors, it displays the proper response. At the end of each set of problems, the program places students at a higher difficulty level, the same level, or a lower level based on the percent correct. Problems presented per level is preset at 10 but may be changed by the teacher to any number from 1 to 50. Students are rewarded for good performance with a chance to play an arcade-style game. Student management records up to 200 student files. Teacher may choose to view, print, or delete all student files or only those of an individual student. Teacher's guide.

ADDITION AND SUBTRACTION MASTERY
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

MULTIPLICATION AND LONG DIVISION MASTERY
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

DECIMALS: ADDITION AND SUBTRACTION MASTERY
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K.....54.95

DECIMALS: MULTIPLICATION AND DIVISION MASTERY
1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K.....$54.95

MATH WORLDS: EXPLORING MATHEMATICS WITH COMPUTERS
DISKETTE ■■■■J H■■

5 Commodore 64 Diskettes, 64K.....$249.95
Outstanding Software Award 1985. **Classroom Computer Learning.**
Adapted from materials developed under the Math network Curriculum Project. The student is drawn into exploring the world of mathematics when computer-generated situations require that math be used as a tool. For example:

* Students learn to use algebra as a tool in a world where things happen only if the student can express him or herself using an algebra-like language to tell the computer what to do.
* Sampling and simple probability concepts become real problem-solving tools if the student can use them to schedule television prime time shows, competing against computer generated schedules.
* Scatter plots and bar graphs take on a new meaning when students can use them to explore the demography of the population of an alien planet, Ugizi.
* Students can apply principles of symmetry and geometry to create fascinating pictures using a turtle graphics language.

Includes 7 units of instruction each designed for about two weeks instruction. A detailed teacher's guide included with each unit.

MEASUREMENTS: CONVERSIONS AND WORD PROBLEMS
DISKETTE ■■■I J■■■

1 Commodore 64 Diskette, 64K.....$35.00
Conversions and word problems for each area. Length: inches, feet, years, miles. Weight: ounces, pounds, tons. Liquid measure: fluid ounces, pints, quarts, gallons. Time: seconds, minutes, hours, days, weeks, months, years. Each problem requires conversion from one unit to another. Guide.

MATH MILEAGE

DISKETTE or CARTRIDGE [P][I]

1 Commodore 64 Diskette, 64K.....$29.95
1 Commodore 64 Cartridge.....$29.95

In *Math Mileage*, kids develop their skills in basic mathematics as they race against the clock. Kids steer their formula race cars through the countryside along a twisting fork-filled course, selecting the shortest route to a number goal. Quick thinking helps them develop their abilities to estimate and plan ahead, both logically and strategically, while solving math problems. The exciting **Night Driving** option increases the challenge and provides practice in mental arithmetic. Multiple skill levels. Up to four racers can take turns trying to achieve their own personal best. User's guide.

MATH ON COMPUTERS

DISKETTE or CASSETTE [I][J]

Clear, well-organized, interactive instruction in math concepts and operations. Superior to programs that are merely drill and explanation. Each lesson begins with instruction. A special feature than allows students to give sample problems to the computer to work. Student observes. Student then does his own problems, randomly presented by the computer. Great flexibility in numbers of problems. Includes branching. Immediate "friendly"feedback. Each concept taught is then enhanced by a game or an interesting activity. Content, use of graphics, type of reinforcement and feedback all very high quality. Addition of thought-provoking games and activities and extra bonus. Teacher's guide. A Quality Educational Designs Program.

FACTORING WHOLE NUMBERS

3 Pet Diskettes, 16K.....$90.00
3 Commodore 64 Diskettes, 64K.....$90.00
6 Commodore 64 Cassettes, 64K.....$90.00

"Definitely a cut above the usual drill and practice...highly interactive programs." **Computing Teacher, Jan 1981.**

Factor Pairs; Pairs and Squares; Primes and Composites; Exponents; Highest Common Factor; Least Common Multiple; Others.

MATH ON COMPUTERS: FRACTIONS

6 Pet Diskettes, 16K.....$175.00
6 Commodore 64 Diskettes, 64K.....$175.00
12 Commodore 64 Cassettes, 64K.....$175.00

"These programs split the learning process into manageable bites..." **Computing Teacher, Jan 1982.** *"This is a remarkable set of programs..."* **C.U.E. Newsletter.**

24 Programs. Concepts; Equivalent Fractions; Division Meaning; Fractions and Measurement; Multiplying Fractions; Multiplication Shortcuts; Adding Fractions; Comparing Fractions; Mixed Numbers; Others.

MATH ON COMPUTERS: DECIMALS

4 Pet Diskettes, 16K.....$120.00
4 Commodore 64 Diskettes, 64K.....$120.00
8 Commodore 64 Cassettes, 64K.....$120.00

"...extremely thorough treatment of its subject." **Courseware Review 1982.**

Shifts Left and Right; Reading Decimals; Adding Decimals; Approximating Decimals; Multiplying Decimals; Dividing Decimals; Estimating Answers; Others.

MISSION: ALGEBRA

DISKETTE [J][H]

1 Commodore 64 Diskette, 64K.....$44.95

Your sister ship has crashed on an asteroid, and you must find her. To discover her path, you must determine the equation of a line, because her communication computer is malfunctioning. Then, you must solve for "Y" to find the coordinates for a point on her path. Moving to the screen which displays the stellar map, you plot the stellar coordinate (x,y corrdinate pair). Solve the problem correctly and win points. A comprehensive learning tool with thousands of linear algebra problems of varying difficulty. Workspace is provided on the screen. Immediate feedback. Help is available and specific explanations and examples are provided. Comprehensive teacher's manual.

MONEY SKILLS

DISKETTE [P][I]

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Provides highly interactive drill in money skills, motivates students with an arcade-style reward game, gives teachers control over several aspects of the program. Includes: Pennies, Nickels, Dimes, Quarters, Half-dollars and Dollars. Students may choose one of the following: Count Money, Can You Buy?, Select Fewest Coins, How Much Change? Problems are randomly generated and students control the pace of the presentation. A challenging arcade-style game rewards good scores (pre-set by teacher). Includes management system. Teacher's guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

NUMBER CRUNCHER

DISKETTE [I][J]

1 Commodore 64 Diskette, 64K.....$49.95

A different activity that encourages reasoning and logical thinking. Based on the "function machine" idea. Student inserts a number. The "machine" accepts the number and processes it. Out pops a new number. The same is done for 3 numbers, then the student has an opportunity to guess the function that has been performed on each number to get the answer. (Example 2 N plus 3). For students who want a challenge in math. Teacher's guide. A Micro School Program from Bertamax, Inc.

NUMBER FACTS

DISKETTE [P][I][J]

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95

Highly interactive drill in number facts, motivates students with an arcade-style reward game and includes a management system. Students choose from: Addition; Subtraction; Multiplication; and Division Facts. Within each lesson students may choose to practice one of several levels. Problems are randomly generated. At the end of each set of questions, students are automatically placed at a higher level, lower level, or the same level depending on their scores. If they have scored a certain percentage they may choose to play a game. Teacher's guide.

NUMBER FACT SHEETS

DISKETTE [A]

1 Commodore 64 Diskette, 64K.....$29.95
1 Commodore 64 Diskette, 64K; Backup.....$44.95

A teacher resource disk which randomly generates worksheets, and corresponding answer keys, containing 2 to 40 number facts. The user first selects from these operations: addition, subtraction, addition and subtraction, multiplication, division, and multiplication and division. The user then selects the parameters from which the problems are generated. User's guide.

NUMBER FARM

DISKETTE [E][P]

1 Commodore 64 Diskette, 64K.....$29.95

Six lively, entertaining games with a farmyard theme help students with counting, number skills and numeral recognition. Good graphics. Includes: Number Farm, Hen House, Old McDonald, Animal Quacker, Horshoes and Crop Count. User's guide.

ORDER OF OPERATIONS PRACTICE

DISKETTE or CASSETTE [I][J][H]

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95

Provdies practice in order of operations with addition, subtraction, multiplication, division and parenthesis. Option of working with either whole numbers or signed numbers is given. All numbers and operations in the expression are generated randomly and all results are integers. Each expression contains three operations and one set of parenthesis. A typical example would be 3*(8−2)/6. The student simplifies the expression one step at a time on the screen. All errors are immediately flagged and explained. When the problem has been completed, a summary of the steps in the solution is shown on the screen. Teacher's guide.

PERCENT: CONCEPTS AND PROBLEMS

DISKETTE or CASSETTE [I][J][H]

1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95

5 lessons. **Percent Concepts** - The computer provides immediate feedback in helping the student learn the concept of percent. **Percent Estimation** - Solving percent estimation problems using percentage problem is given and the computer helps the student find the base or rate, using a related equation. **Percentage** - Rate-base percentage problem is given and the computer helps the student find the percentage.

PIECE OF CAKE

DISKETTE [P]

1 Commodore 64 Diskette, 64K.....$34.95

Math games based on a magical bakery where children learn to add, subtract, multiply and divide by keeping count of cakes as they come from the oven and are sold to customers. Students add and subtract total or figure the number of slices by multiplying and dividing. The game demands fast work to keep the cakes from falling on the floor, so math skills become important. If a student has trouble, the bakers will help and explain how to do the problem. Color graphics.

PRE-ALGEBRA SERIES

DISKETTE [J]

Complete Series (18 Sets; 18 Diskettes); Backups...$899.10

Now you can have a complete support program for pre-algebra students. Includes instruction and practice. Designed to be used during the two years just before a student takes Algebra, whether on a standard or advanced-placement track. Also very useful as review and remediaton for Algebra students needing special help.

Each set contains a Commodore 64 Diskette with backup.

PRE-ALGEBRA: WHOLE NUMBERS.....$49.95
Selectable ranges of numbers and numbers of problems. Includes: Addition, Subtraction, Multiplication and Division plus combining operations and a mental arithmetic exercise.

PRE-ALGEBRA: NUMBER THEORY.....$49.95
Provides the student with an interesting way to explore some topics from number theory. Includes: Primes and Composites, Prime Factorization, Divisibility Tests, L.C.M. and G.C.F., Square Roots.

PRE-ALGEBRA: FRACTIONS.....$49.95
All operations with fractions plus a game that allows students to have fun while working with fractions. Gives the student the backround for more advanced pre-algebra topics.

PRE-ALGEBRA: DECIMALS.....$49.95
Provides students with review work on decimals. All operations. Tutorial practice, timed drill, Includes a game.

PRE-ALGEBRA: PERCENTS.....$49.95
Converting a fraction to a percent; computing discounts; converting percents to fractions, decimals to percents, percents to decimals; finding base, rate and percentage; sales tax and discounts.

PRE-ALGEBRA: METRIC.....$49.95
Gives information on the metric system prefixes along with the assoiciated place value. Activities are provided for length, weight, capacity, and temperature.

PRE-ALGEBRA: GEOMETRY.....$49.95
Understanding and identifying geometric figures. Includes: Angles; Triangles; Lines; Quadrilaterals; Congruent Figures.

PRE-ALGEBRA: PERIMETER, AREA AND VOLUME.....$49.95
Students learn about perimeter, area, and volume through examples and practice, The student is given the option to work with either metric or customary units. graphic displays used to illustrate each concept.

PRE-ALGEBRA: INTEGERS.....$49.95
An abundant use of graphics helps the student to compare integers and learn about absolute value, as well as learn the four basic operations.

PRE-ALGEBRA: NUMBER PROPERTIES.....$49.95
Associative, commutative and distributive properties, as well as the order of operations. Special properties of closure, identity, and inverse along with properties of zero and one are included.

PRE-ALGEBRA: OPEN NUMBER SENTENCES.....$49.95
Simplifying and solving open number phrases and sentences; translating word problems into mathematical sentences. Includes: Number Phrases and Sentences; Solving Number Sentences (+, −); Solving Number Sentences (×, ÷); Solving inequalities; Words to Symbols.

PRE-ALGEBRA: RATIOS AND PROPORTIONS.....$49.95
Includes: Ratio and Proportion; Writing Proportions; Similar Figures; Scale Drawings; Special Ratios.

PRE-ALGEBRA: COORDINATE SYSTEM.....$49.95
Includes: Graphing Ordered Pairs; Using Coordinates; Graphing Equations; Graphing Inequalities; Create-A-Sketch.

PRE-ALGEBRA: SCIENTIFIC NOTATION.....$49.95
A comprehensive tutorial treatment of scientific notation. Includes Exponents; Special Exponents; Powers of Ten; Scientific Notation; Products and Quotients.

PRE-ALGEBRA: PRECISION AND ACCURACY.....$49.95
Provides experience in determing the unit of measure, greatest possible error, relative error, and percent error. Includes: Unit of Measure; Error of Measurement; Significant Digits; Rounding; Estimation.

PRE-ALGEBRA: PROBABILITY.....$49.95
The terminiology necessary for finding the probability of an event is covered along with the adding and multiplying of probabilities. Includes: Probability; Multiplying Probabilities; Adding Probabilities; Odds; Exploring Probability and a utility program allowing students to simulate experiments of their choice.

PRE-ALGEBRA: STATISTICS.....$49.95
Makes statistics easily understandable. Includes: Average; Median and Mode; Frequency Distribution; Graphing; Finding Statistics.

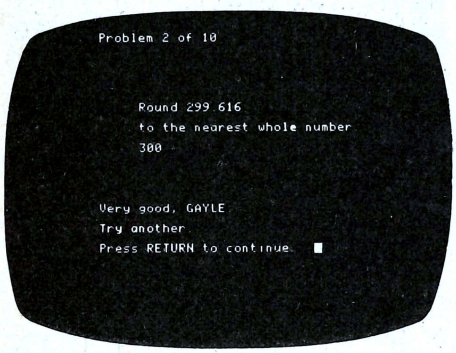
PRE-ALGEBRA: SETS TUTORIAL.....$49.95
Presents mathematical concepts of sets, subsets, and operations of union and intersection with sets. Definitions, terminology, and symbols are enhanced with the use of color graphics.

PLAYFUL PROFESSOR
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$29.95
Entertaining tutorial and drill programs over the four basic operations including integers and fractions. Delightful color graphics in which Playful Professor's "Magic Chalkboard" illustrates problem solving. Seven levels of difficulty, teacher or student selectable. A review section provides help when needed. Incorrect answers receive immediate feedback. Correct answers allow student 2 moves in the reward game of escaping from a haunted house. User's guide.

PUZZLES AND PROBLEM SOLVING
(Teasers by Tobbs)
DISKETTE I J H

1 Commodore 64 Diskette, 64K; Backup.....$55.00
Learning Software Computer Award, **Jan 1984.** *"...fine motivation for review, extra practice, or enrichment." Recommended.* **Booklist, Sept 1, 1983.** *Listed as Exemplary Science and Mathematics Software,* **Classroom Computer News, March 1983.**
Tobbs shows the way in two challenging programs designed to help students think logically to solve addition and multiplication problems. In both programs, a grid and a character called Tobbs appear on the screen. The grid presents a succession of math problems, each with a missing number. Students use logic to decide which number can't be, might be or must be the number that solves the problem on the grid. Both programs offer six levels of difficulty. Teacher's guide.



ROUNDING
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides highly interactive guided drill in rounding whole numbers and decimals, motivates students with an arcade-style game, gives teachers control over several aspects of the programs and includes a student management system. Students may choose from six lessons on whole numbers and four lessons on decimals. Numbers are randomly generated and students control the pace of presentation. Immediate reinforcement. If student scores a certain percentage, which may be adjusted by the teacher, they may choose to play a challenging arcade-style game. Teacher's guide.

SUCCESS WITH MATH SERIES
DISKETTE P I J H

For students who want to get ahead in math or students who want to catch up. These self-correcting tutorials allow students to progress at their own rate. These programs are step-by-step tutors that point out errors, explain rules, and compliment students for a job well done. User's guide.

SUCCESS WITH MATH: ADDITION/SUBTRACTION
1 Commodore 64 Diskette, 64K.....$24.95

SUCCESS WITH MATH: MULTIPLICATION/DIVISION
1 Commodore 64 Diskette, 64K.....$24.95

SUCCESS WITH MATH: FRACTIONS-ADDITION/SUBTRACTION
1 Commodore 64 Diskette, 64K.....$24.95

SUCCESS WITH MATH: FRACTIONS-MULTIPLICATION/DIVISION
1 Commodore 64 Diskette, 64K.....$24.95

SUCCESS WITH MATH: DECIMALS-ADDITION/SUBTRACTION
1 Commodore 64 Diskette, 64K.....$24.95

SUCCESS WITH MATH: DECIMALS-MULTIPLICATION/DIVISION
2 Commodore 64 Diskettes, 64K.....$24.95

SUCCESS WITH MATH: FIRST DEGREE AND ADVANCED LINEAR EQUATIONS
1 Commodore 64 Diskette, 64K.....$34.95

SUCCESS WITH MATH: SIMULATION EQUATIONS/QUADRATIC EQUATIONS
1 Commodore 64 Diskette, 64K.....$34.95
"...an excellent program...I recommend the purchase of this product." **School Microwave Review.**

SNOOPY TO THE RESCUE: ADDITION SKILLS
DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95
Woodstock is missing! Birdnapped!! Help Snoopy climb each treacherous floor of Castle Danger. Then help him rescue Woodstock. Watch out for trap doors, moving floors, and most of all, the robot guards blocking your path. You'll need to be quick as well as clever. The castle is boobytrapped with math challenges. Your knowledge of addition is the only thing that can help you and Snoopy survive. Joystick recommended. Increasingly difficulty play and skill levels. Double-sided disk. User's guide.

STICKYBEAR ARITHMETIC FUN
DISKETTE E P

Bright, bouncy programs with lively, eye-catching animation created by a popular children's illustrator. Hi-res graphics which move freely over color backgounds...full-screen, full-color pictures.

STICKYBEAR NUMBERS
1 Commodore 64 Diskette, 64K.....$29.95
Colorful groups of big moving objects -- trucks, planes, birds, bears, more -- teach numbers and counting for children age 3-6. Instruction guide.

STICKYBEAR SHAPES
1 Commodore 64 Diskette, 64K.....$29.95
Three colorfully-animated game activities in which the child either names a shape, picks a shape, or finds a shape. When the child makes a correct choice, the big bright picture comes alive with colorful animation. Instruction guide.

SWEET SHOPPE
DISKETTE E P

1 Commodore 64 Diskette, 64K.....$39.95
For beginning counting, addition and subtraction. Using a joystick child moves Mr. Jellybean to select correct answers to simple problems. Joystick required.

TELLING TIME
DISKETTE P

1 Commodore 64 Diskette, 64K.....$39.95
Combines guided drill in telling time, an arcade-style reward game, and student management. Choice of four lessons: (1) type digital time when shown clock face, (2) type digital time when given time in words, (3) set clock hands when given digital time, and (4) set clock hands when given time in words. Includes: hours, half-hours quarter-hours and 5 minutes. Teacher's guide.

TIME
DISKETTE or CASSETTE P I

1 Commodore 64 Diskette, 64K; Backup.....$19.95
2 Commodore 64 Cassettes, 64K.....$19.95
Includes: **Clock** - student determines what time is shown on the clock. Optional sound. **Calendar** - three levels of practice in learning calendar skills (days of the week and months of the year).

TOPICS IN MATHEMATICS

MATH GAMES *PIJ*
1 Pet Diskette, 16K; Backup.....$49.95
5 Pet Cassettes, 16K.....$49.95
1 Commodore 64 Diskette, 64K; Backup.....$49.95
5 Commodore 64 Cassettes, 64K.....$49.95
Practice in addition, subtraction, multiplication and division. Correctly and/or rapidly answering problems helps players to win the game. **Math Diving** - Two players compete to climb a tower and be the first to dive into a pool of water. **Race Car Facts** - 2-4 players race cars by rapidly answering basic math facts. **Tic-Tac-Toe** - 2 players compete. Six levels of difficulty. **Speed Facts** - 2 people compete to respond first and to answer the problem correctly. **Math Facts** - Timed practice with six levels of difficulty.

PLACE VALUE TOPICS *PIJ*
1 Pet Diskette, 16K; Backup.....$39.95
4 Pet Cassettes, 16K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$59.95
6 Commodore 64 Cassettes, 64K.....$59.95
Choice of place value, expanded notation, or decimal notation with four levels of difficulty is offered. Also includes timed practice. Tutorial help provided and summary given at completion of lesson.

TRAP-A-ZOID
DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
Uses geometry concepts to trap zoids from space. Practice geometry concepts while playing a game with colorful, lively animation and sound effects. Includes concepts as basic as square and triangle and as complex as scalene and isosceles. Reinforcement for older students or challenge for younger students. Multiple skill levels. User's guide.

TWO-STEP WORD PROBLEMS
DISKETTE I

1 Commodore 64 Diskette, 64K.....$35.00
Word problems involving two steps, using addition, subtraction, multiplication, and division. Some decimals and fractions are included.

SCIENCE

BALANCING CHEMICAL EQUATIONS
DISKETTE or CASSETTE H

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95
Correct procedure for balancing elementary chemical equations is introduced, followed by the challenge of balancing equations of increasing difficulty. The screen is used as a worksheet, the student interacting with the computer on a step-by-step basis as s/he proceeds to balance the equation. All errors are immediatley flagged and appropriate messages with explanations are given. After the student has corrected an error, s/he continues with the problem until the equation is correctly balanced. Number of errors made is given at the end of each problem. Number of problems attempted is under student's control.

CARDIOVASCULAR FITNESS LAB
DISKETTE H C A

1 Commodore 64 Diskette, 64K; Heart Rate Sensor; Interface Box.....$165.00
Provides students and other users with everything they need in order to use the microcomputer to monitor cariovascular activity. Has a wide variety of applications in health classes, physical education, biology, and psychology. Students can investigate the differences between people who exercise and those who do not or smokers and non-smokers. The program can also print out heart rate information for future reference and comparison. Teacher's guide.

CHEMISTRY
DISKETTE H

5 Commodore 64 Diskettes (15 programs), 64K.....$250.00
Designed to review and reinforce chemistry concepts. Contains high resolution graphs, charts and diagrams. Names and grades can be stored on disk file. Teacher's guide. Please give program title when ordering.

Each title contains: 1 Commodore 64 Diskette, 64K and a Teachers Guide. Price per title.....$28.00

PERIODIC TABLE.....$28.00
Formulas, atomic radius, mass number, ionization energy, activity, combining capacity, and the number and type of each type of particle in an atom.

ELECTRON STRUCTURE.....$28.00
Orbitals, valence electrons, electron structure, filling of sublevels and the relationship of valence electrons to the periodic table.

OXIDATION REDUCTION.....$28.00
Reviews oxidation numbers, half reactions, balancing oxidation reduction reactions and determining the number of electrons lost and gained.

ACID BASE THEORIES (Acids).....$28.00
Exercises on Bronsted Lowry theory, naming acids, neutralization reactions and salts.

SOLUTIONS.....$28.00
Students practice and learn naming, ion concentration, molartiy, calorie problems, and the formation of precipitates.

BONDING BETWEEN MOLECULES.....$28.00
Practice with concepts related to hybridization, shapes of molecules Van der Waals forces, and network bonds.

GAS RELATIONSHIPS.....$28.00
Boyle's Law, Charles's Law, partial pressure, volume-volume equation relationships, weight-volume equation problems and densities of gases.

MOLES AND FORMULAS.....$28.00
Converting grams to moles, number of molecules to moles, Avogardro's relationship and percent compostion.

ELECTROCHEMICAL CELLS.....$28.00
Questions pick random variables for problems on electrochemical cells, voltages, oxidizing and reducing agents in cells, and the direction of both electron flow and ion flow.

ORGANIC CHEMISTRY.....$28.00
Questions on identifying isomers, names of simple hydrocarbons and their isomers, functional groups, and some types of reactions are asked.

ACID BASE PROBLEMS (PH of Solutions).....$28.00
Students are asked questions dealing with pH, titration problems, dilution of acids and the neutralization of solid bases.

KINETICS.....$28.00
Practice with problems covering the topics of reaction rates, collision theory, heat of reaction, and activation energy.

CHEMICAL EQUATIONS.....$28.00
Practice with balancing equations, mole relationships in equations and weight-weight problems.

EQUILIBRIUM.....$28.00
Review of Le Chatelier's principle, calculating the equilibrium constant and relating Ksp to solubility of a compound.

BONDING IN MOLECULES.....$28.00
Besides covalent and ionic bonding, students practice on problems covering bonding properties, and the relationship of bonding to the periodic table.

BODY TRANSPARENT
DISKETTE [I][J][H]

1 Commodore 64 Diskette, 64K.....$44.95
An entertaining game which teaches the names, locations and functions of organs and bones of the human body, plus important facts about them. Allows teachers to add their own questions and vary the difficulty levels of game play and anatomy skills independently. User's guide.

CHEMISTRY PROGRAMS SERIES
DISKETTE [H]

Complete Series (2 Sets, 2 Diskettes).....$400.00
These 26 computer-assisted-instruction programs generate questions which help students review and reinforce chemistry topics. Assistance is provided when incorrect answers are entered. Includes loading instructions.

CHEMISTRY PROGRAMS I
1 Commodore 64 Diskette, 64K (13 Programs).....$200.00
- Calorimetry
- Specific Heat Capacity
- Heats of Fusion/Vaporization
- Specific Gas Laws
- General Gas Law
- Faraday's Law
- Gram Molecular Mass
- Mole Concept
- Symbols and Valences Drill
- Naming Compounds Drill
- Formulas of Compounds Drill
- Gas Law Analysis
- Calorimetry Analysis

(Each title, 1 Commodore 64 Diskette, 64K.....$25.00)

CHEMISTRY PROGRAMS II
1 Commodore 64 Diskette, 64K (13 Programs).....$200.00
- Concept of Molarity
- Normality Concept
- Molality Concept Questions
- Stoichiometry: Mass/Mass
- Stoichiometry: Mass/Volume
- Stoichiometry: Volume/Volume
- Stoichiometry: General
- Percent Concentration
- PH Concept
- EMF of Electrochemical Cells
- Chemistry Analysis I
- Chemistry Analysis II
- Stoichiometric Analysis

(Each title, 1 Commodore 64 Diskette, 64K.....$25.00)

DINOSAUR DIG
DISKETTE [I]

1 Commodore 64 Diskette, 64K.....$39.95
An electronic journey back into geologic time during which kids explore and learn all about dinosaurs, from where they lived to why they died. Includes time line game in which kids learn which dinosaurs lived when. Comes with Easy Key overlay which converts the keyboard to a series of function keys. Teacher's guide.

FLIGHT SIMULATOR II
DISKETTE [H][C][A]

1 Commodore 64 Diskette, 64K; Handbook.....$49.95
Put yourself in the pilot's seat of a Piper 181 Cherokee Archer for an awe-inspiring flight over realistic scenery from New York to Los Angeles. High speed color-filled 3D graphics will give you a beautiful panoramic view as you practice takeoffs, landings, and aerobatics. Complete documentation will get you airborne quickly even if you've never flown before. When you think you're ready, you can play the World War I Ace aerial battle game. Flight Simulator II features include: animated color 3D graphics; day, dusk, and night flying modes; over 80 airports in four scenery areas: New York, Chicago, Los Angeles, Seattle, with additional scenery areas available; user-variable weather, from clear blue skies to grey cloudy conditions; complete flight instrumentation; VOR, ILS, ADF, and DME radio equipped; navigation facilities and course plotting; World War I Ace Aerial battle game. Complete information manual and flight handbook.

FORECAST!®
DISKETTE [I][J][H]

1 Commodore 64 Diskette, 64K.....$49.95
Students can now predict tomorrow's weather with this weather station. Employing the same methods used by professionals to track storm fronts, chart weather patterns and stay on top of the weather. *Forecast!* unlocks the mysteries behind weather prediction and helps students develop an understanding of how atmospheric conditions interact to produce the weather. Developed by nationally recognized professional meteorologists, *Forecast!* provides scientific explanations for weather conditions in addition to forecasting the weather itself. Comprehensive program guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs	**J** - Junior High
E - Early Learning	**H** - High School
P - Primary Grades	**C** - College
I - Intermediate Grades	**A** - Adult

GENE MACHINE
DISKETTE [J][H]

1 Commodore 64 Diskette, 64K; Backup.....$69.00
Designed to reinforce what students read in texts about DNA replication and protein synthesis. Provides a brief review, simulates the functions of DNA and RNA, and then lets the students themselves be in charge and manipulate genetic material. Includes the following tasks for students to perform: Shows students a strand of DNA and then they synthesize a complementary strand. From a single strand of DNA students transcribe a strand of mRNA. Students can input an mRNA codon and see the amino acid for which it codes. Students input an amino acid and see the corresponding mRNA codons. Students construct their own polypeptide chains by inputting a series of mRNA codons. Teacher's guide.

GENETICS
DISKETTE or CASSETTE [H]

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 8K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95
"...more than just drill and practice." **Computer Using Educators, April 1984.** *"...excellent program."* **Minn. Dept. Education High Quality Courseware List.**
This classroom tool for health, biology and advanced placement biology explains the basic laws of inheritance. A three generation family tree is randomly generated and graphically displayed. The student is tested after tutorial segment is displayed. When an answer is incorrect, an explanation follows. Graphics with sound.

HEREDITY DOG
DISKETTE [J][H]

1 Commodore 64 Diskette, 64K; Backup.....$59.00
Designed to introduce or to provide a review of basic principles of inheritance. This program uses the dog as the object of investigation since it is a familiar animal and because the action of many genes can be recognized in a clearly visible trait -- coat color. Designed primarily for introductory studies of basic genetics. No specific knowledge of genetics is required in order to use the program. Students at higher levels could use the program as part of their review of basic principles of inheritance. Could also be used by math students as part of their study of probability theory. Teacher's guide.

HUMAN BODY: AN OVERVIEW
DISKETTE [I][J][H]

2 Pet Diskettes, 16K.....$90.00
2 Commodore 64 Diskettes, 64K.....$90.00
"Best Microsoftware of the Year 1983." **Learning Periodicals Group.** *"...highly interactive...makes continual use of animation, sound and humorous reinforcements."* **JEM Research Supplement, 1982.** *Recommended.* **School Library Journal, Aug, 1982.**
See your body in a new dimension! The fascinating systems of the human body come alive with engaging and animated graphics to illustrate the text. Puts you on familiar terms with yourself. For poeple with bodies ages 11 through adult. User-friendly; 8 lessons. Contents: Introduction to the Human Body; Muscular System; Digestive System; Respiratory System; Skeletal System; Circulatory System; Nervous System; Review Test. Comprehensive teacher's guide.

IDENTIFYING MINERALS
DISKETTE [J][H]

1 Pet Diskette, 32K; Backup.....$39.00
1 Commodore 64 Diskette, 64K; Backup.....$39.00
Game format. A mountain climbing expedition provides the setting for students to test their knowledge about the lab identification of mineral's properties: color, streak, luster, hardness, cleavage, fracture, Each correct answer results in a chance to use a different climbing tool. Teacher's Lesson Planner with complete synopsis of material contained in program.

MAKING CIRCUITS
DISKETTE or CASSETTE [I][J]

1 Pet Diskette, 16K; Backup.....$29.95
1 Pet Cassette, 16K.....$25.95
1 Commodore 64 Diskette, 64K; Backup.....$29.95
1 Commodore 64 Cassette, 64K.....$25.95
Very well done. Uses graphics to teach the concept of electrical circuits. Includes both tutorial and practice as the students learn the concepts and then draw wires and switches to connect parallel and serial circuits.

MEASUREMENTS: LENGTH, MASS AND VOLUME
DISKETTE [I][J]

1 Commodore 64 Diskette, 64K; Backup.....$59.00
Teaches students how to measure metric length, mass and volume. First make a classroom presentation of each technique and then let your students learn by practice. This program provides an unlimited number of variations plus a tutorial, so students can learn or review for themselves. Animated high resolution graphics. Teacher's guide.

PHYSICAL SCIENCE PACKAGE
DISKETTE [J][H]

Complete Series (3 Sets) Pet Diskette.....$279.00
Complete Series (3 Sets) Commodore 64 Diskette..$279.00

CHEMISTRY I
1 Pet Diskette, 32K; Backup.....$89.00
1 Commodore 64 Diskette, 64K; Backup.....$89.00
Game format. Students answer questions about solids, liquids, gases, phase changes, atomic structure, periodic table, bonding, and acids and bases. Three games: climbing Focus Mountain, road race and betting money on a game-board. Extra help provided for incorrect responses. Teacher's guide with complete synopsis of each game.

ENERGY: HEAT AND SOUND
1 Pet Diskette, 32K; Backup.....$69.00
1 Commodore 64 Diskette, 64K; Backup.....$69.00
A snowball fight and a sharpshooters contest are the rewards for correct answers about heat energy, temperature, sound energy, and wave motion. Teacher's guide contains a complete synopsis of each game for teacher reference.

MATTER AND ENERGY
1 Pet Diskette, 32K; Backup.....$159.00
1 Commodore 64 Diskette, 64K; Backup.....$159.00
Correct answers allow students to play games -- wagering money on a game-board; racing the clock; assembling a stranded rocket ship and returning to earth; and a sharpshooter contest at a shooting gallery. Topics include: Elements and Symbols; Compounds; Mixtures; Physical and Chemical Changes; Potential and Kinetic Energy; and Energy Changes. All programs provide extra help for incorrect responses. Comprehensive teacher's guide contains complete synopsis of each game.

PHYSICS SERIES
DISKETTE [H]

Complete Series (2 Sets, 2 Diskettes).....$400.00
These 30 computer-assisted-instruction programs generate questions which help students review and reinforce physics topics. Assistance is provided when incorrect answers are entered. Includes loading instructions.

PHYSICS I
1 Commodore 64 Diskette, 64K (14 Programs).....$200.00
- Linear Kinematics
- Projectile Motion
- Momentum/Energy
- Energy and the Inclined Plane
- Inelastic Collisions
- Centripetal Force
- Pulley Systems - Machines
- Calorimetry
- Specific Heat Capacity
- Heats of Fusion/Vaporization
- Vector Analysis I
- Vector Analysis II
- Projectile Analysis
- Calorimetry Analysis

(Each title, 1 Commodore 64 Diskette, 64K.....$25.00)

PHYSICS II
1 Commodore 64 Diskette, 64K (16 Programs).....$200.00
- Specific Gas Laws
- General Gas Law
- Thermodynamics I
- Thermodynamics II
- Transverse Standing Waves
- Longitudinal Standing Waves
- Mirrors and Lenses
- Refraction of Light
- Series Circuit Analysis
- Parallel Circuit Analysis
- Series/Parallel Circuit Analysis
- Electric Field Analysis
- Photoelectric Effect
- Total Internal Reflection
- Gas Law Analysis
- Optics Analysis

(Each title, 1 Commodore 64 Diskette, 64K.....$25.00)

SKELETAL SYSTEM
DISKETTE [I][J][H]

1 Commodore 64 Diskette, 64K.....$70.00
Best Microsoftware of the Year, 1983. **Learning Periodicals Group.** *"...sprinkled with much appreciated humor...an excellent supplement to reinforce lab and lecture material.* **Electronic Learning.**
Five user-friendly programs show your body in a new dimension. Step-by-step, sequential programs with animated graphics. Last program is a review test of preceding material. Contents: Bone to Pick; Major Skeletal Bones; Joints; Ligaments and Cartilage; Review Test. Comprehensive teacher's guide.

WATER AND WEATHER
DISKETTE [J][H]

1 Pet Diskette, 32K; Backup.....$89.00
1 Commodore 64 Diskette, 64K; Backup.....$89.00
Game format. As questions are answered correctly about the **Water Cycle**, students have the opportunity to go to a shooting gallery and try out their marksmanship. A road race provides the setting for a competition based on the topic of **Humidity.** Questions based on humidity tables are included. A game board provides an opportunity for students to wager money as they bet on the topics of **Clouds, Precipitation,** or **Pot Luck.**

YOUR BODY SERIES

DISKETTE I J H

Complete Series (2 Sets), Pet Diskette.....$199.00
Complete Series (2 Sets), Commodore 64 Diskette.$199.00
Correct answers to quesitons on the human body systems allow students to play games. All programs provide extra help for incorrect responses. Comprehensive teacher's guide with complete synopsis of the material contained in the programs.

YOUR BODY I
1 Pet Diskette, 32K; Backup.....$119.00
1 Commodore 64 Diskette, 64K; Backup.....$119.00
Students wager on a money game-board as they correctly answer questions about the **Human Body.** Tests on the **Digestive System** send the students along their way through a graphic of the digestive system. Build the human body in the fewest turns possible by answering questions about **Blood.** A road race is the reward for answering questions about the **Circulatory System.**

YOUR BODY II
1 Pet Diskette, 32K; Backup.....$119.00
2 Commodore 64 Diskettes, 64K; Backup.....$119.00
Students assemble a rocket ship and return to Earth from the planet Uranus by correctly answering questions about the **Muscular System.** A mountain climbing expedition is the reward for testing the students knowledge about the **Skeletal System.** Students wager money on the categories of **Brain, Nervous System** and **Pot Luck** as they compete against each other. A computerized snowball fight is the reward for successfully answering questions about the **Endocrine System.**

SOCIAL STUDIES

ACROSS THE PLAINS

DISKETTE or CASSETTE I J H

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Cassette, 16K.....$39.95
"...a realistic setting, excellent graphics, variability, consistent logic, and apparent freedom from 'bugs'." **Courseware Reviews, 1983.**

Provides students with supplemental information about the westward movement, using a motivational game-playing format that utilizes real places and events. Interspersed with events that occur on the trail are bonus questions about westward movement. Teacher's guide.

AGENT U.S.A

DISKETTE I

1 Commodore 64 Diskette, 64K.....$29.95
The FuzzBomb threatens to turn the United States into a nation of helpless fuzzbodies. Agent U.S.A., top investigator for an elite intelligence organization, must crisscross the country by train searching out the dreaded plague spreader. A great way to learn U.S. geography. Also teaches math skills and problem solving. Guide.

EUROPEAN NATIONS AND LOCATIONS

DISKETTE I J H

1 Commodore 64 Diskette, 64K.....$44.95
Venture to Europe without leaving your home and discover where European nations, history, cities, current events and geographical landmarks are located. An ideal way for kids to learn European facts and it allows teachers to add their own questions. Includes a complete map of Europe as well as four regional European maps. Students will learn country names, capitals, bordering nations, geographic landmarks, major mountain ranges, rivers and lakes, historical and cultural facts and where they belong on a map in a fun and challenging game. Teachers can vary the difficulty levels of both game play and geography skills independently to provide continued challenge for users of different abilities. User's guide.

EXPEDITIONS

DISKETTE I J

1 Commodore 64 Diskette, 64K; Backup.....$46.00
Three simulations allow students to make and test decisions as they assume the roles of frontier Americans during three historical periods. The **Furs** program simulates fur trade in eastern North America in the 1770's. **Oregon** simulates a trip by covered wagon from Independence, Missouri, to Oregon City, Oregon, in 1847. **Voyageur** simulates the transportation of furs by canoe in northern Minnesota and southern Ontario in the early 1800's. Teacher's guide.

GREAT MAINE TO CALIFORNIA RACE

DISKETTE I J

1 Commodore 64 Diskette, 64K.....$29.95
Geography game in which two dragsters racing from coast to coast move forward or backward depending on the players' ability to correctly answer questions about state capitals, sizes, boundaries, products, geographic features and other facts. Option to play against the computer. Ages 10 and up.

FAMOUS NAMES IN AMERICAN HISTORY

DISKETTE J H

1 Commodore 64 Diskette, 64K; Backup.....$50.00
Students are given clues to the identities of famous people in American history and try to guess the name. Student may run the program alone as a drill or compete against another student. Review section allows students to look at the names and clues. Drill and practice section quizzes the students on the historical figures. Includes: **Exploration and Colonization** - from 1000 A.D. through the early 1700's. **Revolutionary War and the War of 1812** - heroes, traitors, and memorable characters from both sides of the 2 wars. **Westward Expansion** - exploration and expansion from the late 1700's through the 1860's. **Civil War** - leaders and heroes from both sides. **Industrial Revolution** - industrial giants and early labor leaders. Guide.

HISTORY AND GEOGRAPHY

DISKETTE or CASSETTE I J

1 Pet Diskette, 16K; Backup.....$50.00
1 Pet Cassette, 8K; Backup.....$50.00
1 Commodore 64 Diskette, 64K; Backup.....$50.00
1 Commodore 64 Cassette, 64K; Backup.....$50.00
Revolutionary War Quiz - In this game players compete in answering questions on the revolutionary war. It is written so that it would be relatively easy for the user to substitute any questions thus creating a computer quiz on any subject. **Regions of the U.S.** - A drill and practice exercise where the user is asked what region of the United States randomly selected States are located in. **States and Capitals** - This program drills the user on randomly selected states and their capitals. If the user does not know the capital, the computer offers clues to help determine the capital. **Presidents** - A drill and practice session on presidents of the United States.

HISTORY AND GEOGRAPHY QUIZ PLUS

DISKETTE J H

2 Commodore 64 Diskettes, 64K.....$39.95
Questions and answers over Social Studies topics. Can be preceded by written tutorial if desired. Menu-driven. User selects area of study. Students may go back to tutorial segment to find answers to questions missed. Geography programs include: U.S.A., Continents, North America, World Capitols, State Capitals, Rivers, Oceans, World Landmarks. History programs include: Americas Explorers, The Founding Nations, Early Man, Ancient Egypt, Greece, Roman Empire and Middle Ages. Teacher's guide.

MAP DIRECTIONS 1 AND 2 AND LATITUDE/LONGITUDE

DISKETTE or CASSETTE P I J

1 Commodore 64 Diskette, 64K; Backup.....$29.95
3 Commodore 64 Cassettes, 64K.....$29.95
Map studies with the following exercises: student determines what direction of four (N,S,E,W) or eight (N,NE,E,SE,S,SW,W,NW) the arrow points to; student determines what direction correctly answers the given question. Student practices on a grid with every degree of latitude and longitude marked.

MARKET PLACE

DISKETTE I J

1 Commodore 64 Diskette, 64K; Backup.....$45.00
Helps illustrate elementary concepts in economics. Allows students to make and test decisions as they control business ventures. Each simulation focuses upon different aspects of the economics market place. In **Sell Apples**, the student attempts to determine the best price for selling apples based on the number sold. The **Sell Plants** program emphasizes the function of advertising. In **Sell Lemonade**, students must make decision similar to those they would make running a real lemonade stand. The **Sell Bicycles** program examines the concept of supply and demand. Teacher's guide.

MILLIONAIRE, THE STOCK MARKET SIMULATION

DISKETTE J H

1 Commodore 64 Diskette, 64K.....$49.95
"...a realistic, entertaining simulation of stock-market trading that teaches the basics of investing. **Personal Software, Feb 1984.**

Stock market simulation game based on actual stock market trends - not just random numbers. Players start out with money but only a few hundred shares of stock. They then buy or sell stocks or options, buy on margin or borrow money against their net worth, if necessary. They pay broker's commissions and taxes. They have business information on the different companies, news reports for the week, industry averages, week's high, low, close and change. Very realistic and fun to play. Recommended for junior or senior high math or economics classes, as well as anyone interested in the stock market. One of the best stock market simulation games available. User's guide.

MEMORABLE AMERICANS

DISKETTE or CASSETTE I J H

1 Commodore 64 Diskette, 64K; Backup.....$45.00
1 Commodore 64 Cassette, 64K; Backup.....$45.00
Students are given clues to the identities of famous Americans and try to guess their names. Students may run the program alone or with another student as a game. Review section allows students to look at the names and clues. Includes: Inventors and Inventions; Presidents: Black Americans: American Women.

STATES AND CAPITALS/ CONTINENTS AND COUNTRIES

DISKETTE I J H

1 Commodore 64 Diskette, 64K; Backup.....$44.00
Provides extra drill and practice on self-paced study for students learning world and United States geography. Students learn the characteristic shapes of states from the graphic maps used in **States** and **Capitals.** Students also learn a state's associated geographic region, as well as its capital city. **Continents** helps students associate 91 countries with the continent on which they are located. **Countries** provides a drill on the capital cities of these countries. Teacher's guide.

STATES AND TRAITS

DISKETTE I J H

1 Commodore 64 Diskette, 64K.....$44.95
This game combines U.S. geography, history and current trivia. Move states to their proper locations on a map of all the states or just a region. Position the states with state boundaries or only mountains and rivers to guide you. Or play the numerous traits games and identify where the information belongs on the map. Traits games include bordering states and rivers, historical facts, current trivia and capitals. "In which state was there a confederate and union capital in the last year of the Civil War?" "Which state is famous for the hogs outnumbering the people 5 to 1?" Design your own games using built-in symbols, such as trees and factories, that you can easily place on the maps, plus add your own questions. An ideal way to teach U.S. geography and social studies. Multiple skill levels. Teacher's guide.

STATES, CAPITALS AND PRINCIPAL CITIES

DISKETTE I J

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Highly interactive guided drill in basic U.S. Geography skills. Motivates students with an arcade style reward game, gives teachers control over several aspects of the program, and includes a student management system. Exercises cover state's map location; name and abbreviation; capital city; locations of principal cities; and regional maps. Teacher's guide.

U.S. CONSTITUTION TUTOR

DISKETTE J H C A

1 Commodore 64 Diskette, 64K.....$35.00
Included in Minnesota State Department of Education High Quality Courseware List, 1984.

Tutors students on important aspects of the U.S. Constitution for required citizenship or Constitution tests. Features a tutorial mode with extra help screens and practice questions, as well as complete explanations for every answer choice. In the test mode, any missed questions are given again in the tutorial mode when the test is completed. Topics include: Legislative, Executive, and Judicial Branches; Amendments to the Constitution; Constitutional Rights; Elections; Federalism; Separation of Powers; and Checks and Balances. questions can be selected by topic or by difficulty level. Teacher's guide.

U.S. HISTORY: GROWTH OF A NATION

DISKETTE J H

1 Commodore 64 Diskette, 64K; Backup.....$89.00
Games to help your students reinforce their knowledge of American history. **Constitution to Civil War** - a pretend wagering game to test their knowledge about well known national leaders, territorial growth of the nation, the slavery question, economic life, and U.S. Geography. **Civil War to World Power** - A space game with questions about the Civil War, reconstruction, the industrialization of America, the Spanish American War, and the country's entrance into World War I. **Modern America** - A computer snowball fight rewards correct answers on U.S. history during the 1920's, the Great Depression, World War II, and 20th Century presidents. Backup; Teacher's guide.

VOYAGE OF THE MAYFLOWER

DISKETTE P I J H

1 Commodore 64 Diskette, 64K.....$29.00
A simulated recreation of the voyage of 1620. Full color graphics and sound, organized on five progressively difficult levels. Participant must organize and allocate supplies of food, drink and supplies both before and during the voyage. As difficulty levels increase more historical, geographical and meteorological knowledge is required to achieve success.

WORLD WAR II

DISKETTE or CASSETTE ■■■■JH■■

1 Commodore 64 Diskette, 64K; Backup.....$45.00
1 Commodore 64 Cassette, 64K; Backup.....$45.00
Famous Names from World War II. Students are given clues to the identities of famous heroes and villains of World War II. Student then tries to guess the identity of the individual. Student may run the program alone as a drill or compete against another student. Contains a drill/quiz section and a review section. Includes; Famous Places/Battles from World War II, Countries of World War II, Plane and Ships of World War II.

BUSINESS EDUCATION

BUSINESS EDUCATION 1

DISKETTE or CASSETTE ■■■■JHCA

1 Pet Diskette, 16K; Backup.....$45.00
1 Pet Cassette, 8K; Backup.....$45.00
1 Commodore 64 Diskette, 64K; Backup.....$45.00
Loan Amortization - A complete loan analysis program that will calculate either payment amounts, number of periods, rate of interest, length of the loan, or interest, and print an amoritization schedule. **Bank Reconciliation** - Accepts the beginning bank balance, checkbook balance, checks written, outstanding checks, charges, and reconciles a bank statement. If the reconciliation is off, you may review and modify the outstanding checks, checks written, etc. **Stock Market Simulation** - Simulation where players buy and sell stocks with the objective being to increase their net worth. The simulation allows selection from stocks that fluctuate in price based on market indicators such as prime interest rate, inflation, economic outlook, etc. **Depreciation** - Will calculate depreciation according to the straight line, double declining balance, and sum of the years digit methods and print a depreciation schedule.

KEYBOARD CADET

DISKETTE ■■■IJH■■

1 Commodore 64 Diskette, 64K.....$39.95
Develops keyboarding skills. Teaches proper hand positioning and techniques. Carefully structured curriculum using a course of study that's most popular with typing teachers. Correct finger position always on screen. Good graphics. Emphasizes keyboard accuracy and speed. Moves from letter to word to sentence to paragraph typing. User's guide.

LEARN-TO-TYPE

DISKETTE ■■■IJH■A

1 Commodore 64 Diskette, 64K.....$34.95
Teaches beginning typing and skills, including correct finger position. Starts with one-key practice and advances to groups of letters and words. Computer keeps track of and provides drills on keys that give most difficulty. Includes timed test drill section that tabulates number of words typed, number of errors, and computes wpm scores. User's guide.

LEARN-TO-TYPE-PLUS

DISKETTE ■■■IJ■■■

1 Commodore 64 Diskette, 64K.....$49.95
All the features of Learn-To-Type, plus delightful graphic rewards and complete record keeping. Teacher's guide.

MASTERTYPE IMPROVED

DISKETTE ■■■IJH■A

2 Commodore 64 Diskettes, 64K.....$39.95
Improved educational typing program now has the elements of a traditional touch-typing course in addition to being the most entertaining way ever to learn to type. Includes a second diskette of finger positioning drills and games to increase your typing speed and accuracy. User's guide.

TYPING SKILLS

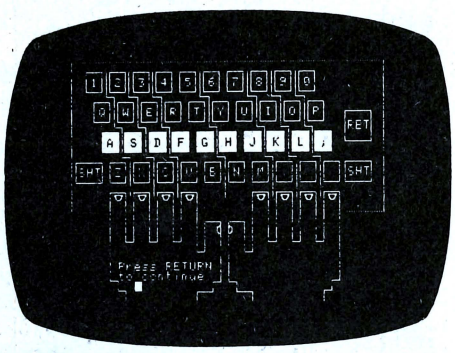
DISKETTE or CASSETTE ■■■IJ■■■

1 Commodore 64 Diskette, 64K; Backup.....$30.00
1 Commodore 64 Cassette, 64K; Backup.....$30.00
Displays keyboard on screen and asks the student to type various letters. If correct, the program continues. If incorrect, the correct key lights up on the screen and the student is given another try. Includes reaches drill. Emphasizes the different reaches in game format. User selcts reaches to be drilled on.

TYPING TUTOR AND WORD INVADERS

DISKETTE ■■PIJH■A

1 Commodore 64 Diskette and Cassette, 64K.....$24.95
"This is the best typing tutor we have seen yet..." **Info-64.** *"Computer aided instruction at its best."* **Commander Magazine.**
Excellent touch typing instruction accompanied by an arcade mode to make learning fun.



TYPING

DISKETTE ■■■IJ■■■

1 Commodore 64 Diskette, 64K.....$39.95
1 Commodore 64 Diskette, 64K; Backup.....$54.95
Provides guided drill and practice opportunities in basic typing skills as well as a test which determines students typing speeds. The disk employs an arcade-style reward game to motivate students, gives teachers control over several aspects of the program, and includes a student management system. Lessons include: Home Row, Top Row, Bottom Row, Upper Case, Numbers, and Speed Test. Teacher's guide.

TYPING TUTOR III WITH LETTER INVADER

DISKETTE ■■■IJH■A

1 Commodore 64 Diskette, 64K.....$49.95
"...ideal coach..." **Personal Software.** *"...most miraculous of programs..."* **Whole Earth Software Catalog.**
Typing Tutor III program is already recognized as a classic. An excellent instructional system with the addition of an entertaining game. Teaches and drills on alphabet and number keys. Reports users raw speed in wpm, number of errors and corrected speed. Automatically adjusts to designed lessons. Arcade-style game *Letter Invaders*, gives players a break from the teaching program and sharpens typing skills at the same time. As the players improve the game gets faster. User's guide.

WIZARD OF ID'S WIZTYPE

DISKETTE or CARTRIDGE ■■■IJ■■■

1 Commodore 64 Diskette, 64K.....$34.95
1 Commodore 64 Cartridge.....$39.95
Teaches computer keyboard skills with famous cartoon characters, The Wizard of Id and Spirit. Includes sentence and paragraph typing, adjustable speed and several different types of practice drills. Players can make up their own lessons. Cartoons add enjoyment to learning. Guide.

CAREER EDUCATION

CAREER SCAN IV PROGRAM

DISKETTE ■■■■■HC■

2 Pet Diskettes, 32K.....$169.00
2 Commodore 64 Diskettes, 64K.....$169.00
A comprehensive career search and exploration package accessing over 700 occupational titles. This program is based on the latest and most usable guidance classification system available--the Standard Occupational Classification (SOC). The SOC provides a useful structure to group the 12,000 primary titles in the Dictionary of Occupational Titles. Totally self-instructional. Students do not need assistance when using them even if they have never used a computer before. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each occupation which matches the students profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. For one or two drive systmes. Manuals and teacher's guides.

LEVELS

SEPIJHCA

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

VOCATIONAL/TECHNICAL

COMPUTER MECHANIC

DISKETTE ■■■■■H■A

1 Commodore 64 Diskette, 64K.....$26.95
"Unlike any book you could buy about car maintenance. There is something very personal and encouraging about the way it walks me through the various procedures step by step." **Family Computing.**
Easy to use program that teaches the basics of auto maintenance and keeps records of car's maintenance history. Using detailed graphics the program will diagnose any problems and suggest how to fix them. Even explains where routine checks are made and how to make them. Guide.

INJURED ENGINE

DISKETTE ■■■■■H■■

1 Commodore 64 Diskette, 64K.....$34.95
Educational simulation/game which could be a valuable element in vocational classes. Object of game is to operate an automobile engine at the optimum cost-per-mile. Players must figure out proper mix of tuning, maintenance and repairs. Players can inspect, adjust, repair or replace parts of the engine. Graphic details show all moving parts of the motor and close-up view of primary engine functions. Each change comes at a price which is factored into the operating cost-per-mile. An exciting learning experience. User's guide.

HOME ECONOMICS

FOOD FACTS: FIVE PROGRAMS

DISKETTE ■■■■■JH■■

1 Commodore 64 Diskette, 64K; Backup.....$46.00
These high-interest information retrieval activities help students learn about their personal food habits and basic knowledge of nutrition. **Cereals** uses color graphics to provide information on sugar content of 80 cold cereals. **Chemicals in Foods** tests a student's ability to identify common foods through their ingredients. In **Fast Foods** the student selects a menu from a fast-food restaurant and sees how long it takes to burn up those calories in various physical activities. In **Food Graphs** students may select from 63 common foods to find the RDAs in each of eight nutrients. **Vitamins** tests students on their knowledge of fat- and water-soluble vitamins. Teacher's guide.

HEALTH AWARENESS GAMES

DISKETTE ■■■■■JHC■

1 Commodore 64 Diskette, 64K; Backup.....$99.00
Five programs draw on extensive tables of statistics about people's health, living habits, and other behaviors, as these relate to life expectancy. Prepared to foster awareness of good health practices. Appropriate for junior high school through college to supplement courses in health, biology, nutrition, athletics, and physiology. Includes: **Coronary Risk** - calculates the individual's risk of coronary heart disease and explains the risks. **Why Do You Smoke?** - determines each smoker's primary reasons for smoking, based on the smoker's answers to 18 multiple-choice questions. Offers advice on dealing with smoking and its effects. **Exercise Weight** - on the basis of answers to a series of questions determines the most desirable weight for the individual. User is given a diet pattern that will best suit his or her needs. **Life Expectancy** - dramatically demonstrates the effect of a number of life conditions and personal characteristics on anyone's expected lifespan. **Lifestyle** - offers advice based on the effects of personal living habits on health and life expectancy. Teacher's guide.

MODEL DIET

DISKETTE ■■■■■H■A

1 Commodore 64 Diskette, 64K.....$29.95
Calculates nutritional requirements, breaks down a daily diet into its nutritional content. Compare nutritional intake with the government's Recommended Daily Allowance. A section on the importance of vitamins and minerals, their deficiency symptoms, toxic levels and food sources included. Can store and print out any food file, a daily diet and its nutritional value. Guide.

WHAT DID YOU EAT YESTERDAY

DISKETTE ■■■■■JH■■

1 Commodore 64 Diskette, 64K.....$39.00
Students list the foods they consumed on a specific day and the computer analyzes the diet for calories, vitamins, fat, protein, sodium and other nutrients. The analysis is printed on the computer screen or on a printer. Suggestions concerning excesses and deficiencies are offered. Based on USDA figures. Guide.

MUSIC

BANK STREET MUSIC WRITER
DISKETTE ■■■IJH■■

1 Commodore 64 Diskette, 64K.....**$49.95**
For children or adults with or without prior musical knowledge. Write music complete with melody, harmony and rhythm. Stores up to 75 musical staffs with 8000 notes. Four voices. Hi-resolution graphics. No additional software needed. User's guide.

MUSIC SERIES
DISKETTE ■■■IJH■■

Complete Series (4 Sets; 4 Diskettes).....**$175.00**
Four programs designed to teach music theory. The four packages can be used singly or in a combination to provide practice as successive levels of difficulty. Teacher's guide with each set provides instruction for using the program.

MUSIC: RHYTHM
1 Commodore 64 Diskette, 64K; Backup.....**$43.00**
The **Counting** program has students complete a measure with the correct note type. In the **Rhythm** program students match played rhythm patterns with the measure that is displayed on the screen.

MUSIC: TERMS AND NOTATION
1 Commodore 64 Diskette, 64K; Backup.....**$45.00**
Presents music notation using graphics identification, enharmonic equivalents, and key signature. Contains 547 music terms divided into three levels of difficulty.

MUSIC: SCALES AND CHORDS
1 Commodore 64 Diskette, 64K; Backup.....**$44.00**
Whole-Half and **Find the Half** provide drills to differentiate whole and half steps between notes. **Triads** provides practice in the aural recognition of triads. In **Scales**, students identify major and minor scales, as well as four modes. **Sevenths** provides practice in identifying seventh chords.

MUSIC: PITCH
1 Commodore 64 Diskette, 64K; Backup.....**$43.00**
Includes drills on aural and visual recognition of intervals; determining a wrong note in a musical pattern; and completing a measure of music with the correct note.

MUSIC SHOP
DISKETTE ■■■■■JH■■

1 Commodore 64 Diskette, 64K.....**$44.95**
Lets everyone be a musician or composer regardless of past music or computer experience. Users can create original masterpieces, or play and rearrange more than two dozen finished pieces included in the program. Users can compose, edit, save, print and play music using standard musical notation. Includes: Broad musical capabilities; Ease-of-use and speed; Full control of sound: easy selection of preset instrument sounds; Full editing features; Print-out professional-looking sheet music. User's guide.

MUSIC TEACHER: THE NOTABLE PHANTOM
DISKETTE ■■PI■■■■■

1 Commodore 64 Diskette, 64K; Keyboard overlay..**$49.95**
Students learn to play a keyboard instrument and to read music with the fun of ghosts, spiders and The Notable Phantom. Ghosts plot notes on a musical staff for students to play on the piano keyboard before the ghosts carry the notes away. Spiders carry in note names that students must play correctly to capture the spiders in spider cages. They listen while The Phantom plays his musical note and play the same note to win points. Teaches note names and positions and provides ear training. Children can play one of the games, compose, save, play and display their own simple tunes, or play and listen to the songs built into the program. Includes a piano keyboard overlay. Provides immediate feedback. User's guide.

MUSICALC SERIES
DISKETTE ■■■IJH■■■

"This new music-synthesis program lets you spread your musical wings and fly, even if you can't read a note. There aren't many professional-quality instruments you can buy for less than $600, and none of them are as easy to play, or as capable of a range of sound, as this one." **Personal Software, May 1984.**

MUSICALC 1
1 Commodore 64 Diskette, 64K.....**$49.95**
Build non-musician's confidence with "no-fault" music. Select any of 32 instrument sounds and 32 songs from memory. Play along with and compose melodies using the keyboard like a piano. Create and compose without knowing music notation. Create instrument sounds and sound effects in real time. Edit scores in real time. Compose and play using rests, slurs, and notes of varying duration. Save sounds and scores on a disk. Teacher's guide.

MUSICALC 2
1 Commodore 64 Diskette, 64K.....**$34.95**
Requires *MusiCalc 1* score files. Allows user to: print *MusiCalc 1* compositions in music notation on screen or paper; link *MusiCalc 1* scores to play up to 7680 notes; synchronize two Commodore 64s using *MusiCalc 1.* Teacher's guide.

SIGHT AND SOUND MUSIC SOFTWARE
DISKETTE ■■■IJH■■

INCREDIBLE MUSICAL KEYBOARD
1 Commodore 64 Diskette, 64K; 2 Books; Key.....**$49.95**
Transforms your computer into a musical instrument. The *Incredible Musical Keyboard* not only sounds like a keyboard synthesizer, it plays like one, too -- complete with black and white keys rivaling those of any piano. Comes complete with its own software program that will get you playing music on your computer right away. It even includes two music books, one for the beginner, and one for the more advanced musician. Teacher's guide.

MUSIC PROCESSOR
1 Commodore 64 Diskette, 64K.....**$34.95**
Create, edit, record, play and compose your own musical arrangements. Use your joystick to change any of the 99 preset instrument and special effect sounds in any one of the 16 pre-recorded tunes or play and record songs using the Commodore 64's keyboard. Teacher's guide.

KAWASAKI SYNTHESIZER
2 Commodore 64 Diskettes, 64K.....**$49.95**
Transforms your computer into a programmable synthesizer and sound processor. **The Performer** - Eight user-friendly screens give you one-finger control over instrument sounds, waveforms, vibrato and other special effects. Use the Polyphonic Keyboard and preset sounds to create your own music. **The Composer** - Four user-friendly screens complete with graphic keyboard displays and unique three-track recording capabilities that let you create dynamic compositions. Use the Sound Editor to produce an unlimited number of instrument sounds and special effects. Teacher's guide.

KAWASAKI RHYTHM ROCKER
1 Commodore 64 Diskette, 64K.....**$39.95**
Create space sounds and hi-resolution color graphics to the beat of electronic rhythms. Features an easy-to-use multitrack recording capability. A creative music program that offers a variety of electronic percussion and synthesizer sounds that you lay down on top of different pre-programmed bass lines. Or program in your own bass line and co-ordinate it all with hi-resolution color graphics. Teacher's guide.

SONGWRITER
DISKETTE ■■PIJH■■

1 Commodore 64 Diskette, 64K; Cable.....**$39.95**
Included in A+ Software Supplement...More than 70 educational programs recommended by teachers. *"...can turn even the most inexperienced musician...into instant songwriters...allow use musical tools in a musical way, while taking advantage of the unique capabilities of the computer."* **Electronic Learning, April 1984.**
Have fun and compose music at the computer while you learn music theory. Create your own songs or edit and improvise from SONGWRITER'S library of songs. Colorful graphics. Includes cable to link computer to stereo. User's manual.

LOGIC, PROBLEM SOLVING and LEARNING GAMES

ADVENTURE MASTER
DISKETTE ■■■IJH■■■

2 Commodore 64 Diskettes, 64K.....**$44.95**
A unique tool that becomes a literal "adventure factory" when fueled by imagination. Users are helped to design their own text-adventure. Easy to use, it allows budding game developers to describe places, plan events, create secret exits, hide objects and build entire worlds into which other adventurers may travel in quest of a prize or to save a galaxy. Opens up the world of game design and encourages the use of mapping, problem-solving and strategy skills. Comes with adventures written by Christopher Chance and Jean Craighead George. User's guide.

CREATIVE PLAY
DISKETTE ■■■I■■■■

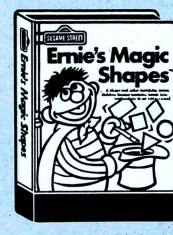
1 Commodore 64 Diskette, 64K; Book.....**$47.95**
"An outstanding value." **Learning Magazine.** *Learning Computer Software Award.*
Number games and word games, mapping and maze activities, coordinate geometry, symmetry puzzles. Uses strategy games to develop critical thinking skills. Provides a lively introduction to the exciting world of computers. 25 interactive programs and an excellent teacher's guide.

EARLY LEARNING
DISKETTE, CASSETTE, CARTRIDGE

EARLY GAMES
1 Commodore 64 Diskette, 64K.....**$34.95**
"...a fun learning tool for preschool children..." **Personal Computer Age, July 1983.**
Learning games for young children or early primary students. Very little adult assistance needed, picture menu, bright colors, large numbers and letters. Nine separate games include: Match Numbers, Match Letters, Count Blocks, Add Stack of Blocks, Subtract Blocks, Working With Alphabet, Comparing Shapes, Drawing and Saving Colorful Pictures, Practice Spelling Names.

KOALA MUPPET LEARNING KEYS (Kids Computer Keyboard)
1 Commodore 64 Diskette, 64K; Keyboard.....**$79.95**
Simple, easy-to-use keyboard designed especially for young children. Includes software which provides letter, number and color learning activities as well as creative fun. Features the Muppet• characters - Kermit, Miss Piggy and friends. Large easy-to-read keys arranged in A-Z and 0-9 sequence for easy location. Includes "Go", "Stop", "Oops" and "Help" keys. Makes computer learning activities fun and challenging for those children too young to deal with the complexities of the conventional keyboard. Teacher's guide.

MATCH MAKER
1 Commodore 64 Diskette, 64K.....**$29.95**
Playfully guides children through a series of discrimination games involving colors, shapes, sizes, and directions. Music and colorful graphics. Helps children prepare to read. Teacher's guide.



SESAME STREET LEARNING GAMES

ERNIES MAGIC SHAPES
1 Commodore 64 Diskette, 64K.....**$24.95**
1 Commodore 64 Cartridge.....**$24.95**
Provides practice in matching shapes and colors, helping children sort out the things they see in their world. By looking closely at the figures ERNIE uses in his magic act, they can match shapes, identify colors, structure parts into meaningful wholes, recognize figures embedded in other figures and distinguish similarities and difference. Six skill levels. User's guide.

BIG BIRD'S SPECIAL DELIVERY
1 Commodore 64 Diskette, 64K.....**$24.95**
1 Commodore 64 Cartridge.....**$24.95**
Provides a playful setting in which children can practice classifying objects. BIG BIRD and LITTLE BIRD have to deliver the right packages to the right places. To help them do this, a child must consider and compare different objects according to their form, class and, on the highest level, function. User's guide.

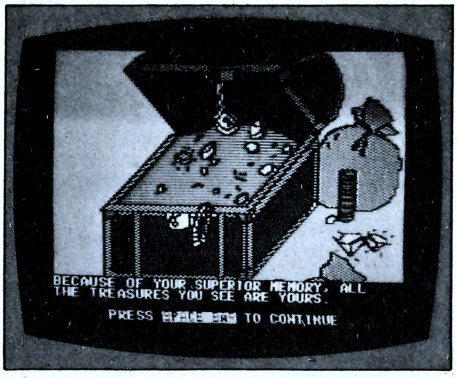
SHAPE AND COLOR RODEO
1 Commodore 64 Diskette, 64K.....**$29.95**
Six entertaining learning games with a rodeo theme help children recognize and match shapes and colors. Includes: Shape Roundup, Cowhand Brand Color Mix and Match I and II, Rope Trick, and Rodeo Flags. User's guide.

GAME SHOW MASTER
DISKETTE ■■■IJH■■

1 Commodore 64 Diskette, 64K.....**$34.95**
"...programmer followed all the rules for an ideal program...excellent variety of motvational devices." **Courseware Reviews.**
An educational tool for vocabulary development. This entertaining computer game uses animated color graphics with the appearance of a TV game show. Entertains while educating children about varied subjects--biology to famous cities to nursery rhymes to advanced vocabulary and more. It includes an easy to use authoring system so you can add your own subjects. Lessons in 15 subject areas are included with the package. Teacher's notes.

IN SEARCH OF THE MOST AMAZING THING
DISKETTE ■■■IJ■■■

1 Commodore 64 Diskette, 64K.....**$26.95**
A computer game that is instructive, not destructive. Just as importantly, however, it is fun. Written by Tom Snyder, educator and author of the best-selling Snooper Troops® Detective Series. Designed to let your kids negotiate with aliens instead of destroying them, because, given the opportunity, kids enjoy using their minds. Requires joystick. User's guide.



MEMORY CASTLE

DISKETTE I J H

1 Commodore 64 Diskette, 64K; Backup.....$55.00

Recommended for purchase by **Family Computing** *and* **Cricket. Learning Software Award.**

Helps your students remember instructions and follow directions. Inside Memory Castle, students are given a list of instructions..."go to the shield, then to the cemetery to the grave of Sir Gray, then to the dungeon...". As students move from place to place the risks are high. One false move and they are banished from the castle. To help them play the game successfully, they learn a special code, they will be amazed at the power of their minds...and so will you! Teacher's guide.

MIND STRETCHER

DISKETTE or CASSETTE I J

5 Pet Cassettes, 16K.....$100.00
5 Commodore 64 Diskettes, 64K.....$125.00
4 Commodore 64 Cassettes, 64K.....$80.00

Specifically designed for gifted and talented students. These students do not just play games, they look for winning strategies, they analyze patterns, they develop charts of the previous moves made; they are challenged to use analytical problem solving techniques to solve these interesting, entertaining and educational puzzles. Includes; **Jigway** - Four series of picture puzzles to assemble. **Traffic Jam/Chain Reaction** - 2 programs which provide exercise in strategy, as you try to force your opponent into a vulnerable situation. **Rubik/Candles** - Two programs which increase in difficulty to challenge the student as he develops his problem solving skills. **Black/Kayles** - Two programs with deceivingly simple rules, but the strategy in these two contests makes use of advanced mathematical theory. **Jinx/Welter** - Two unique diversions to develop deductive reasoning and insight into structure of mathematical abstractions. Teacher's guide.

MOPTOWN PARADE

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95

Learning Computer Software Award, Jan. 1984.

A progression of seven playful games designed about colorful Moppet Characters that teach logic, strategy development and pattern recognition. Guide.

MOPTOWN HOTEL®

DISKETTE P I

1 Commodore 64 Diskette, 64K.....$39.95

Learning Computer Software Award, Jan 1984.

In seven increasingly challenging games children test hypotheses, use analogies and develop strategic thinking skills. A sequel to Moptown Parade. User's guide.

Moptown Hotel is a trademark of The Learning Company.

PIPES: A PROBLEM-SOLVING EXERCISE

CARTRIDGE I J

1 Commodore 64 Cartridge.....$34.95

"...Valuable learning in a friendly game format..." **Classroom Computer Learning, April/May 1984.**

Students help Arlo, the Plumber, connect a water line from the water supply to several houses. Challenging and fun as student figures out the most efficient and cost-effective plan. Develops advance-planning, visual/spatial thinking, and math skills. Numerous variations. One or more players. User's guide.

QUIZAGON

DISKETTE J H A

2 Commodore 64 Diskettes, 64K.....$44.95

Who is the master of all trivia? Is it you, or the Grand Quizard? This exciting game requires knowledge, strategy, and luck. Over 6,000 questions in four categories: Science and Geography, Sports and Games, Arts and Entertainment, and Potpourri. User's guide.

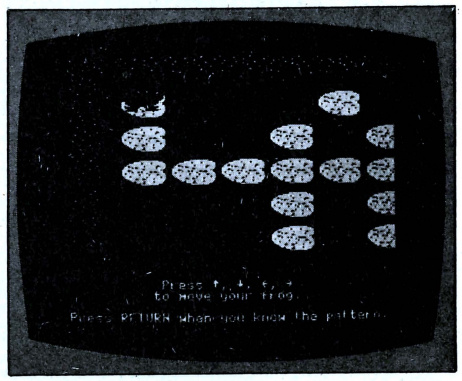
SCIENCE FICTION INTERACTIVE ADVENTURES

DISKETTE H

Interactive software based on plots and characters created by great authors. Puts the student right in the center of the adventure story. The story unfolds as the student makes choices and decisions that control the outcome. The settings are based on the science-fiction classics but the action is determined by the student. Every adventure features an advanced text parser system that understands hundreds of words, full color graphics and a beautifully illustrated package that includes background, a word list, and a hint book.

AMAZON
DRAGONWORLD
FAHRENHEIT 451 INTERACTIVE ADVENTURE
RENDEZVOUS WITH RAMA

(Each title, 1 Commodore 64 Diskette, 64K; Book$32.95)



STRATEGIES IN PROBLEM SOLVING

DISKETTE I J H

FACTORY: STRATEGIES IN PROBLEM SOLVING
1 Commodore 64 Diskette, 64K; Backup.....$55.00

Noted as Exemplary Math/Science Courseware. **Classroom Computer News.** *Award Winner* **- Council for Exceptional Children Software Search - Gifted Category.**

Color graphics and animation. Challenges students to create geometric "products" on a simulated machine assembly line that they design. Focuses on problem-solving strategies, including working backwards, analyzing a process, determining sequence and applying creativity. Includes: **Test Machine** - Students test the effects of three electronically simulated machines on a raw material. **Build a Factory** - Students set up an assembly line and watch it produce a product. **Make a Product** - Using their knowledge from the first two programs, students now enjoy the challenge of building a factory to duplicate a product shown on the screen. Backup; teacher's guide.

INCREDIBLE LAB: STRATEGIES IN PROBLEM SOLVING
1 Commodore 64 Diskette, 64K; Backup.....$55.00

Recommended for purchase by **Classroom Computer Learning** *and* **Teaching and Computers.** *Award Winner* **Council for Exceptional Children Software Search-Gifted Category.** *Merit Award* **Consumer Electronic Show.**

Imagine a beaker filled with a bubbling solution and a list of "crazy chemicals" to add to the mixture. The students choose and mix the chemicals, the bunson burners heat up, and from the vapor a monster emerges. Each chemical produces a specific feature of a monster. The student discovers through trial and error, each chemical's effect. Students try to predict the monster that will emerge from their mixture. High resolution graphics, vivid color and animation. Backup; teacher's guide.

POND: STRATEGIES IN PROBLEM SOLVING
1 Commodore 64 Diskette, 64K; Backup.....$55.00

Best Software of the Year 1983, **Learning Magazine.** *Award Winner* **Council for Exceptional Children Software Search - Gifted Category** *and* **Learning Software Award.**

A small green frog lost in a pond of lily pads, helps students recognize and articulate patterns, generalize from raw data and think logically. The student chooses from six ponds, or levels of difficulty, in which lily pads are displayed in increasingly complex patterns. Student's task is to determine the patterns that will get a frog across the pond. Students collect points by directing their frogs through as many ponds as possible with the fewest number of moves. Emphasis is on efficiency of pattern. Backup; teacher's guide.

RIGHT TURN: STRATEGIES FOR PROBLEM SOLVING
1 Commodore 64 Diskette, 64K; Backup.....$55.00

Allows students to predict, experiment and learn about mathematical concepts of rotation and transformation. Students can create a pattern, and then specify the transformation--90° flip, right diagonal flip. The computer shows what the transformation does to their pattern. Then it creates its own pattern below, and the students must specify how to flip it to achieve their original transformation. Challenging but fun! Backup; teacher's guide.

SNOOPER TROOPS SERIES

DISKETTE I J

Complete Series (2 Sets; 2 Diskettes).....$53.90

"...stresses logical reasoning and hypothesis testing in an adventure game format." **Popular Computing, March 1983.** *"...exceptionally well done, highly motivational, and valuable in helping users learn to take notes and analyze relevant information."* **Creative Computing, April 1983.**

Snooper Troops detective games help children learn to take notes, draw maps, classify and organize information and help develop vocabulary and reasoning skills. Ages 10-adult. Offers the challenge and excitement of solving a mystery and features full color graphics and sound. Teacher's guide.

Snooper Troops I (*The Granite Point Ghost*)
1 Commodore 64 Diskette, 64K.....$26.95

Snooper Troops II (*The Disappearing Dolphin*)
1 Commodore 64 Diskette, 64K.....$26.95

STORY CLASSICS: INTERACTIVE ADVENTURES

DISKETTE I J

Some of the greatest classics of all time now available as a unique line of adventure games. Highly intereactive. Each game places your students right in the role of hero or heroine. So, instead of just reading what happens, students will find out through first-hand experience as they make decisions, explore their territory and resources and create adventures of their own. User's guide with each set.

SWISS FAMILY ROBINSON
BELOW THE ROOT

(Each title, 1 Commodore 64 Diskette, 64K.....$26.95)

TIC TAC SHOW MASTER

DISKETTE I J H

1 Commodore 64 Diskette, 64K.....$34.95

"...a versatile program and valuable instructional tool." **Software Reports, July 1983.** *"We give it our top grade."* **Creative Computing, April 1983.**

Animated quiz show emcee interacts with 1 or 2 palyers of any age as the program entertains, motivates and teaches. Popular in schools. Comes with lessons in 15 subjects from Myths to Man. Or use the Authoring System to write your own lessons-no knowledge of computers required. Teacher's guide.

COMPUTER LITERACY

In this section we have omitted most of the grade level designations because the level is largely dependent upon the previous experience of the computer user. Some adults and teacher's can be beginners while some junior high students are quite sophisticated in the use of computer languages and programming (and vice versa). Programs which are designed specifically for younger children are noted in the description. Most programs may be used by junior high level and up.

ALGERNON: AN INTRODUCTION TO PROGRAMMING LOGIC

DISKETTE

1 Commodore 64 Diskette, 64K; Backup.....$55.00

Algernon the mouse loves running through mazes-but your students have to help by "programming" Algernon to find the way out. Students can select from easy to hard mazes...or use an editor option and make their own maze. Teaches student to think logically and sequentially. Gives students a feel for the structural and practical elements of programming. Backup; teacher's guide.

C64 TUTOR

DISKETTE

1 Commodore 64 Diskette, 64K.....$29.95

Puts you in charge with a Commodore 64 tutorial, screen display editor, sprite editor, music systhesizer and programmer's calculator. Great for new users.

COMMODORE LOGO

DISKETTE

2 Commodore 64 Diskettes, 64K.....$68.95

Popular education language for students and teachers that is simple enough for pre-schoolers and sophisticated enough to challenge college students. Small triangular cursor called a "turtle" is used to draw graphics easily. Includes sound and music commands which use the music synthesis capability. Also includes: four different types of screens; cataloging commands; and a TRACE command for programming and debugging. Gives ability to do LIST processing and read music, graphics, and text files previously created with LOGO. Program and utilities disk included. User's guide.

EXPERIENCING PROCEDURES
DISKETTE

1 Commodore 64 Diskette, 64K; Backup.....$36.00
Designed to be a student's first introduction to computer programming. Learning to organize a program into a set of procedures not only introduces good program design but also good problem-solving skills. With **Fly**, an easy-to-learn, graphics-oriented language, students can write procedures to create geometric objects on the screen. This introduction to procedures can be tranferred to the learning of other computer languages. Teacher's guide.

EXPLORING LOGO: COMMODORE
DISKETTE

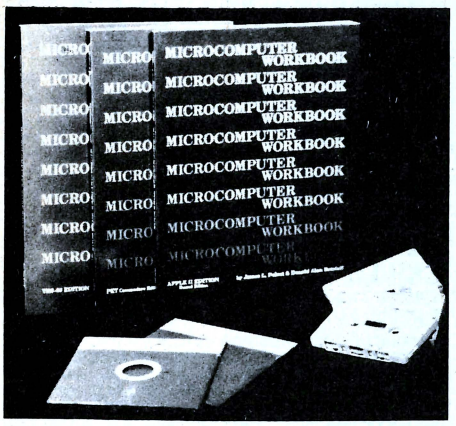
1 Commodore 64 Diskette, 64K; Activity Cards.....$49.00
Activity cards that teach a concept, present a challenge and offer help. Students learn how to create graphics; work with words, lists and sentences; use sound and music; do computations and design group activities. Accompanying diskette gives sample programs. **NOTE: for 64K with Terrapin.**

FRIENDLY COMPUTER
DISKETTE

1 Commodore 64 Diskette, 64K; Backup.....$46.00
Five programs that introduce young students to the Commodore 64 computer. **Keyboard** introduces students to the locations of the keys on the Commodore keyboard. **Zebug** uses a game format to provide students with practice in locating the keys. **Term Worm** graphically displays the major components of a computer system. **Picture** allows students to create drawings using single keystroke commands. The pictures may be saved on the diskette and later shown by the **Picture Show** program. The teacher's guide contains student handouts.

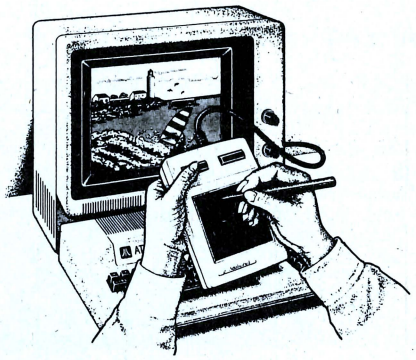
HOW TO PROGRAM IN BASIC
DISKETTE

1 Commodore 64 Diskette, 64K.....$29.95
Use your Commodore 64 computer to learn how to program. This twelve-lesson interactive tutorial will teach you everything from basic programming fundamentals up to advanced high resolution graphics. Move at your own pace -- take two nights or two months. Even if you've never written a program before, you'll be at home in Commodore BASIC before you know it. User's guide.



HOW TO PROGRAM IN BASIC TUTORIALS
DISKETTE

2 Commodore 64 Diskettes, 64K.....$69.00
2 Commodore 64 Diskettes, 64K; Workbook.....$75.95
This software/workbook is designed to be used while you actually have your "hands on" the microcomputer. Students do not need to have any programming background; the workbook and software give students the capability of learning the BASIC programming language in a microcomputer assisted instructional mode. The workbooks are useful as reinforcement as students progress through the programs. Questions are included to stimulate student interaction with the microcomputer and test the student's understanding of the BASIC programming action. Includes keyboard operation, Introduction to BASIC, Programming: Beginning, Program Input commands, Program Branching commands, Arrays, Character strings, Functions and subroutines, more. Tutorial software parallels chapters in the workbook.



KOALAPAD
DISKETTE

KOALAPAD TOUCH TABLET WITH KOALA PAINTER
1 KoalaPad; 1 Commodore 64 Cartridge.....$109.95
1 KoalaPad; 1 Commodore 64 Diskette, 64K.....$99.95
A video sketch pad which eliminates the need for a keyboard. Students can control graphics, game commands and other computer functions by merely moving their finger across the special touch-sensitive surface of the KoalaPad. Excellent computer experience for the very young as well as a fascinating tool for any age. Accompanying the KoalaPad is the Koala Painter, a free-hand drawing and design tool which allows the student to draw, using several different brushes and colors. Students can design geometric shapes of all sizes, magnify their drawing for close-up work and changes, and can store their designs and drawings for later use. The popularity of this set will not be limitd to students! User's guide.

KOALA COLOR BOOK 1 (Geometric Design)
1 Commodore 64 Diskette, 64K.....$29.95
A collection of geometric designs to be colored using the Koala Painter. Along with the on-screen designs are descriptions of how they were created using LOGO, and explanations of geometry terms.

KOALA PRINTER
1 Commodore 64 Diskette, 64K.....$24.95
Allows you to print pictures drawn with the KoalaPad.

KOALAPAD PROGRAMMER'S GUIDE
1 Commodore 64 Diskette, 64K.....$19.95
Helps you take full advantage of all the KoalaPad tablet features. With it, you can develop your own software for the KoalaPad tablet. Includes smoothing algorithms, menu programs and many special hints and tips.

KOALA PROGRAMMER'S TOOL KIT
1 Commodore 64 Diskette, 64K.....39.95
An extensive collection of software tools to create new programs for the KoalaPad. The tools are programming routines in BASIC and machine language for reading KoalaPad input, creating graphics images and much more. User's guide.

KOALAGRAMS SPELLING 1
1 Commodore 64 Diskette, 64K.....$39.95
Hi-res educational spelling and word recognition game for children. The bear-cursor is moved around the screen to pick up letters and unscramble the words. There are many categories of words to choose from and clues are given for each word.

KOALA SPIDER EATER
1 Commodore 64 Diskette, 64K.....$29.95
Your KoalaPad tablet becomes a keyboard in this challenge between musical notes and spirited spiders. Spider Eater teaches kids note recognition, meter, and composition as they zap spiders from the screen scurrying home to their webs.

MEET THE COMPUTER: BEGINNING BASIC
DISKETTE I J H

1 Commodore 64 Diskette, 64K; 15 Activity Folders; 2 Information Cards; Wksh.....$29.00
Recommended for purchase. **Curriculum Review, Journal of Computers in Mathematics and Science Teaching.**
Color-coded activity folders teach BASIC programming statements and commands. How-to program for students and teachers who want to develop computer literacy from the beginning or simply to brush up on their computer skills.

ROCKY'S BOOTS®
DISKETTE

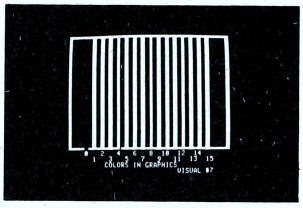
1 Commodore 64 Diskette, 64K.....$49.95
Learning Computer Software Award, **Jan 1984.**
A game that helps build a basic groundwork in logic skills. Players build animated logic machines to score points in the game. While building the machines, they learn the basics of computer circuits. The machines operate a kicking boot and players score or lose points for "booting" particular objects. Rocky's Boots has the appeal of an arcade game with the content of a logic course. Color graphics; music and sound effects that can be turned on and off. Fun and challenging for all ages. Requires color monitor. Joystick and Mouse are optional.
Rocky's Boots is a trademark of The Learning Co.

S.A.M. SOFTWARE AUTOMATIC MOUTH
DISKETTE

1 Commodore 64 Diskette, 64K.....$59.95
"Excellent demonstration of the computer's capability to output spoken English." **Software Reports.**
S.A.M., The Software Automatic Mouth, is the first software-only speech synthesizer. It's designed to give you all the power of conventional hardware speech devices without the hardware. You can use it to write instructions that speak. Stories that tell themselves. And creative new games with characters that converse or crack jokes. Easy to use. You choose the pitch, tone, speed and inflection. User's guide.

SIMON'S BASIC
CARTRIDGE

1 Commodore 64 Cartridge.....$34.95
Beginner/intermediate programming language. 114 additional programming commands. Specially designed aids for faster, more efficient, BASIC programming. Binary, decimal and hexidecimal commands. Structured programming, screen manipulation, plotting. Sprite and user defined graphic commands. Includes: graphics BASIC. Draw lines, circles, elipses, boxes, arcs, fill in. Has music commands. Automatic 3 voice music and sound effect. Allows user to set up windows for plotting. All graphic commands in clear English.



STEP BY STEP I
DISKETTE or CASSETTE

1 Commodore 64 Diskette, 64K; Wkbk.....$59.95
3 Commodore 64 Cassettes, 64K; Wkbk.....$59.95
"...a superb example of a successful blend of various media...teaching principles are sound, the execution is virtually flawless, and the whole thing works." **Popular computing, Oct 1982.**
32 programs and a 64-page workbook teach programming in BASIC for the beginner. Introduces all important BASIC commands and programming logic, including simple string logic and one-dimensional arrays. Lessons are interactive, presented in a question-and-answer format on the computer screen. The workbook adds extra information. Through instruction, structured practice, and frequent skills testing, the user learns how to write BASIC programs. Teacher's guide.

TURTLE GRAPHICS
CARTRIDGE

1 Commodore 64 Cartridge.....$59.95
"...a painless way to learn to write short progams." **Micro, March 1983.**
Uses the full graphic features of the Commodore 64. Helps teach the basics of programming with color and pictures. Easy and versatile with true programming environment. Complete documentation.

TURTLE TRACKS
DISKETTE

1 Commodore 64 Diskette, 64K.....$29.95
Learning Computer Software Awards, Jan. 1984.
Learn to write your own programs by creating your own designs. Use simple commands to draw pictures and patterns, and make melodies. Start with easy shapes, then combine them to build more complex programs. You can even watch your program run one step at a time. User's guide.

TYPE 'N' WRITER
CARTRIDGE

1 Commodore 64 Cartridge.....$29.95
A keyboard skill program which includes: a complete keyboard introduction, a touch typing instruction and drill, and a small word processor for creating and editing up to 8 page documents. Appropriate for children 8 and over. User's guide.

VISIBLE COMPUTER: 6502
DISKETTE

1 Commodore 64 Diskette, 64K; Book.....$39.95
Allows your computer to explain itself visually, taking you on explorations into the deepest recesses of its vast brain; teaching you machine language -- the common bond of all computers! Sit back and watch the steps the microprocessor takes to process an eight bit word into a complex action. See how a computer's brain works! Teacher's guide.

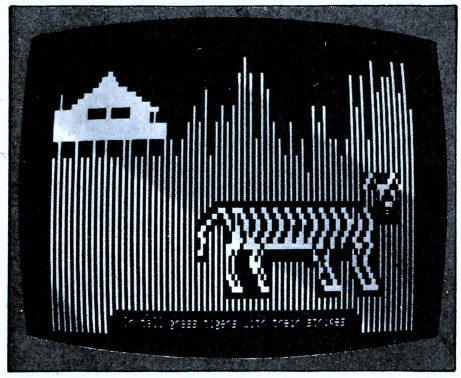
TRS-80 COLOR MICROCOMPUTER, General Information

All programs listed for the TRS-80 Color Computer require Extended Color BASIC. If you do not have this on your machine(s), it can be added by your local computer dealer. It is a rather important feature since most educational programs do require extended color basic.

None of the materials listed here can be run on the TRS-80 Model I or III; they are designed only for the TRS-80 Color Computer. Please designate cassette or diskette and the amount of "K" (memory) of your computer when placing an order. Machines with 32K will run programs requiring 32K or less. Machines with only 16K will not run 32K programs. Your computer dealer can advise you about adding more memory or "K" to your machine.

See also Teacher/Administrator section.

ENGLISH



BETTER VIEW A ZOO
TRS-80 COLOR COMPUTER
DISKETTE E P

1 TRS-80 Color Computer Diskette, 32K; Backup....$55.00
Recommended. **Courseware Report Card.**
Starts off with a story-poem adventure about a boy and girl searching for wild animals in a jungle. Six theme-related activities and games, such as **Snake Slide** and **Tiger Hunt**, focus on number and letter identification, counting, and the concepts of up/down and left/right. Teacher's guide.

GRAMMAR I
TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J

1 TRS-80 Color Computer Diskette, 16K; Backup....$45.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$45.00
Recognizing and reinforcing parts of speech. The program randomly selects sentences and displays them on the screen. Each time the student presses the space bar, the program will display a word from the sentence in a box being held by a robot. The student indicates what part of speech it is and presses the return key. If he is correct, the robot will shake its head "yes". Contents: Recognition of: Adjectives, Adverbs, Nouns, Verbs, Pronouns; Person, Place or Thing.

LEARNING ABOUT SOUNDS IN READING
TRS-80 COLOR COMPUTER
DISKETTE E P

2 TRS-80 Color Computer Diskettes, 48K.....$39.95
Begins with phonics, the building blocks of reading skills. It introduces the sounds of vowels and consonants in reading: short vowels, long vowels and initial consonants, the phonics skills necessary for the beginning reader to develop successful reading or to help improve reading of older students. User's guide.

NOUNS AND PRONOUNS (English Pack)
TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I

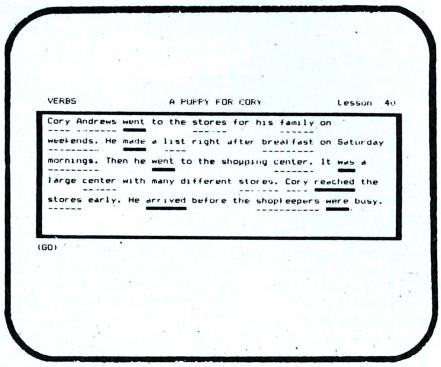
1 TRS-80 Color Computer Diskette, 16K.....$29.95
Nouns - introduces common and proper nouns. Explained as being either person, place, or thing. Uses examples. Follow-up exercises to reinforce the lesson. **Pronouns** - Explains how a pronoun can be used in place of a noun. Personal pronouns are presented in first, second and third person form. Follow-up exercises to reinforce the lesson. Guide.

NOUNS REVIEW
TRS-80 COLOR COMPUTER
DISKETTE I

1 TRS-80 Color Computer Diskette, 16K.....$22.95
Random practice exercises to strengthen English skills. Student identifies both common and proper nouns as being either person, place or thing. Guide.

PARTS OF SPEECH
TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J

1 TRS-80 Color Computer Diskette, 32K; Backup....$35.00
1 TRS-80 Color Computer Cassette, 32K; Backup....$35.00
In this program, each of the parts of speech are illustrated with examples. Drills are provided in which the student must identify the part of speech for each of the words in randomly selected sentences. Scoring is provided at the conclusion of the drill and practice session. Backup and teacher's guide.



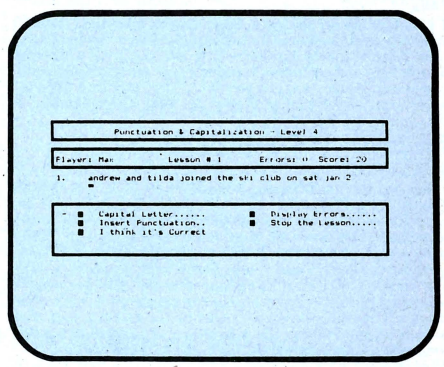
PARTS OF SPEECH
TRS-80 COLOR COMPUTER
DISKETTE I J

PARTS OF SPEECH I
4 TRS-80 Color Computer Diskettes, 32K.....$119.80
The object of this program is to provide practice in recognizing the part of speech of a given word. The name of a part of speech appears in the box. The student decides if the word beside the "eater" is used as that part of speech. Game-like setting; 10 lessons per program; words incorrectly identified are listed at the end of the lesson. Teacher's guide. A Micro School Program from Bertamax, Inc.
Parts of Speech I: Grade 3 - Nouns and Verbs. 10 lessons.
Parts of Speech I: Grade 4 - Nouns and Verbs in context. 10 lessons.
Parts of Speech I: Grade 5 - Nouns, Verbs, and Adjectives in context. 10 lessons.
Parts of Speech I: Grade 6 - Nouns, Verbs, Adjectives and Adverbs in Context. 10 lessons.
(Each title, 1 TRS-80 Color Computer Diskette..$29.95)

PARTS OF SPEECH II
4 TRS-80 Color Computer Diskettes, 32K.....119.80
Provides practice identifying parts of speech in a paragraph. The student underlines all words in the paragraph that are used as the part of speech indicated in the upper left-hand corner. At Level 4 the student first underlines all the nouns and then all of the verbs. 10 lessons per level; story theme for each level; immediate reinforcement; final report gives total percent for each lesson and for each level. Teacher's guide. A Micro School Program from Bertamax, Inc.
Parts of Speech II, Grade 3 - Nouns and verbs. 10 lessons
Parts of Speech II, Grade 4 - Nouns and verbs. 10 lessons.
Parts of Speech II, Grade 5 - Nouns, verbs and adjectives. 10 lessons
Parts of Speech II, Grade 6 - Nouns, verbs, adjectives and adverbs (single words).
(Each title, 1 TRS-80 Color Computer Diskette..$29.95)

PRE-READING
TRS-80 COLOR COMPUTER
DISKETTE E P

1 TRS-80 Color Computer Diskette, 32K; Backup....$44.00
Adds fun to pre-reading skills. Youngsters can practice upper-case letter recognition and alphabetical ordering using **Caterpillar. Train** focuses on lower-case letter recognition and alphabetical ordering. **First Letter** presents pictures of objects to help children identify initial letters in words. **Pictures, Words,** and **Shapes** help children exercise recall skills, devise successful game-playing strategies, and identify identical pictures, words, and shapes in games of concentration. Teacher's guide.



PUNCTUATION AND CAPITALIZATION, Grades 1-8: SERIES
TRS-80 COLOR COMPUTER
DISKETTE P I J

Complete Series (6 Sets; 6 Diskettes).....$174.95
User-oriented programs enable students to edit sentences to correct errors in punctuation and capitalization. No typing skill is required. Changes are made by selecting changes from a menu of choices. **Features:** Carefully graded sequence of skills; 10 lessons per grade level; covers skills included in most standardized tests; complete user control; automatic error checking; self scoring -- immediate feedback upon lesson completion; examples given -- easy to use. Teacher's guide. A Micro School Program from Bertamax, Inc.
PUNCTUATION AND CAPITALIZATION, Grades 1-3
PUNCTUATION AND CAPITALIZATION, Grade 4
PUNCTUATION AND CAPITALIZATION, Grade 5
PUNCTUATION AND CAPITALIZATION, Grade 6
PUNCTUATION AND CAPITALIZATION, Grade 7
PUNCTUATION AND CAPITALIZATION, Grade 8
(Each title, 1 TRS-80 Color Computer Diskette, 32K$34.95)

READING COMPREHENSION SKILLS SERIES
TRS-80 COLOR COMPUTER
DISKETTE P I J

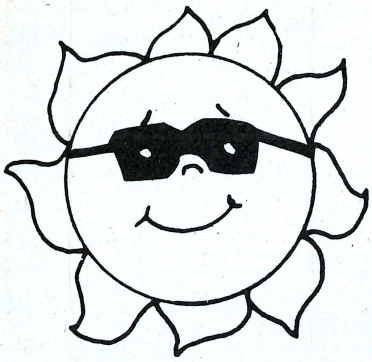
READING COMPREHENSION SKILLS 1
1 TRS-80 Color Computer Diskette, 32K.....$39.95
Grades 1-3. Presents beginning exercises in reading with understanding; introduces concepts and works with cause and effect, similarities and differences, predicting outcomes, main ideas and more. Teacher's guide.

READING COMPREHENSION SKILLS 2
1 TRS-80 Color Computer Diskette, 32K.....$39.95
Grades 4-6. Provides continuing work in reading with understanding, with an emphasis on application of concepts and skills in the use of analogy, comparison and contrast, fact and opinion, sequence of events, judgements, etc. Teacher's guide.

READING COMPREHENSION SKILLS 3
1 TRS-80 Color Computer Diskette, 32K.....$39.95
Grades 7-8. Helps to develop advanced skills in reading with understanding, emphasizing the integration and application of learning materials. Teacher's guide.

SPELL BOMBER/ SUPER SPELL BOMBER
TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J H

2 TRS-80 Color Computer Diskettes 16K.....$48.90
2 TRS-80 Color Computer Cassettes, 16K.....$40.90
Spell Bomber - Destroy enemy bombers by spelling the mystery word. The bomber gets closer with each inaccurate letter. Eight tries to guess the word before your ship is bombed! Three levels. **Super Spell Bomber** - For the above average word game enthusiast. Follows the same tantalizing effects as the original Spell Bomber. One or two players. Guide.



READINESS SKILLS

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE S E P

Developed by specialists in Early Childhood Education, these programs address specific skills and are curriculum based. Because the users of these programs are younger, the graphics are colorful and fun to use, but they are not games. They are learning materials designed to be used by individual students or small groups. Comprehensive teacher's handbook includes reinforcement activities and testing materials. Your students will have fun with these materials, and you will be pleased that they are learning.

ORDERING/SEQUENCING
4 TRS-80 Color Computer Diskettes, 32K.....$115.00
4 TRS-80 Color Computer Cassettes, 32K.....$115.00
Ordering/Sequencing: Seriation - Arranging objects into simple seriation patterns according to size and time sequence.
Ordering/Sequencing: Patterning - Identifying, constructing and completing simple to complex patterns.
Ordering/Sequencing: Complex Patterns - Construction and completion (multi-directions, more than 3 attributes).
Ordering/Sequencing: Size and Time - Subtle size and time sequences requiring completion and ordering.
(Each title, 1 TRS-80 Color Computer Diskette, 32K$29.95)
(Each title, 1 TRS-80 Color Computer Cassette, 32K$29.95)

COUNTING SKILLS
9 TRS-80 Color Computer Diskettes, 32K.....$260.00
9 TRS-80 Color Computer Diskettes, 32K.....$260.00
Counting Skills: One to One - One to one correspondence.
Counting Skills: Number Recognition - Includes ordinal and cardinal properties.
Counting Skills: Beginning Sets - Beginning set theory.
Counting Skills: Number Recognition 5-10 - Number recognition and formation of numerals 5-10.
Counting Skills: Matching - Matching numerals 5-10 to sets of objects.
Counting Skills: Sets - Identifying equal sets and presentation of joining sets.
Counting Skills: Number Recogniton 10-20 - Recognition and formation of numerals 10-20.
Counting Skills: Assigning Numers - Assigning numerals 10-20 to correct number of items.
Counting Skills: Addition and Subtraction - Single digit addition and subtraction using pictures along with numerals.
(Each title, 1 TRS-80 Color Computer Diskette, 32K$29.95)
(Each title, 1 TRS-80 Color Computer Cassette, 16K$29.95)

LANGUAGE ARTS READINESS SKILLS
5 TRS-80 Color Computer Diskettes, 32K.....$145.00
5 TRS-80 Color Computer Cassettes, 32K.....$145.00
Letter Recognition - Recognition and formation of lower case manuscript letters.
Letter Matching - Matching upper and lower case manuscript letters.
Word Families - Introduction to and formation of word families (at/et/it/en/and).
Beginning Consonants - Identifying beginning consonant sounds of familiar objects.
Rhymes - Identifying rhyme labels through the use of pictures.
(Each title, 1 TRS-80 Color Computer Diskette, 32K$29.95)
(Each title, 1 TRS-80 Color Computer Cassette, 32K$29.95)

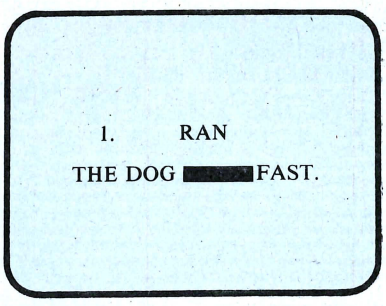
SPELLING SERIES

TRS-80 COLOR COMPUTER
DISKETTE P I J

Complete Series (7 Sets, 7 Diskettes).....$279.65
Multi-grade level spelling program based on the test/teach/test format. A pre-test determines which words need to be learned. Learning activities follow the pre-test. A post-test checks spelling and comprehension. Includes 4,000 commonly used words. Teachers may also enter their own word lists. User's guide with each set.

SPELLING GRADE 2
SPELLING GRADE 3
SPELLING GRADE 4
SPELLING GRADE 5
SPELLING GRADE 6
SPELLING GRADE 7
SPELLING GRADE 8

(Each title, 1 TRS-80 Color Computer Diskette, 48K$39.95)



SPELLING IN CONTEXT, Grades 1-8 SERIES

TRS-80 COLOR COMPUTER
DISKETTE P I J

Complete Series (8 Sets; 8 Diskettes).....$250.00
A most useful method of teaching spelling. Learning to spell a word in the context of a sentence helps to provide meaning to the word, and providing meaning for the word should increase the chance it will be remembered. In this program, each word is flashed on the screen for a brief time. The period of time is chosen by the user. Then the word disappears and a sentence is displayed. The sentence has a blank where the letters of the word will appear as the user types them. The user types the word and presses the ENTER key. If the word is correct, a positive message is given. If the word is misspelled, one of several corrective messages, like "TRY AGAIN" is given. If a second error is made on the same word, the correct spelling of the word is given. The user is required to spell the word correctly before the next word is presented. Each misspelled word is recorded by the computer. If the user scores less than 90 percent correct on the lesson, the misspelled words are reviewed at the end of the regular lesson. In this way, the user is given several chances to practice spelling words correctly. Color graphics and sound. Teacher's guide. A Micro School Program from Bertamax, Inc.

SPELLING IN CONTEXT, Grade 1
1 TRS-80 Color Computer Diskette, 32K.....$34.95
2 Programs, 28 lessons, 280 words.

SPELLING IN CONTEXT, Grade 2
1 TRS-80 Color Computer Diskette, 32K.....$39.95
2 Programs, 40 lessons, 400 words.

SPELLING IN CONTEXT, Grade 3
1 TRS-80 Color Computer Diskette, 32K.....$39.95
2 Programs, 40 lessons, 600 words.

SPELLING IN CONTEXT, Grade 4
1 TRS-80 Color Computer Diskette, 32K.....$39.95
4 Programs, 40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 5
1 TRS-80 Color Computer Diskette, 32K.....$39.95
4 Programs, 40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 6
1 TRS-80 Color Computer Diskette, 32K.....$49.95
4 Programs, 40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 7
1 TRS-80 Color Computer Diskette, 32K.....$49.95
4 Programs, 40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 8
1 TRS-80 Color Computer Diskette, 32K.....$49.95
4 Programs, 40 lessons, 800 words.

SPELLING LESSON AIDS (Words Package)

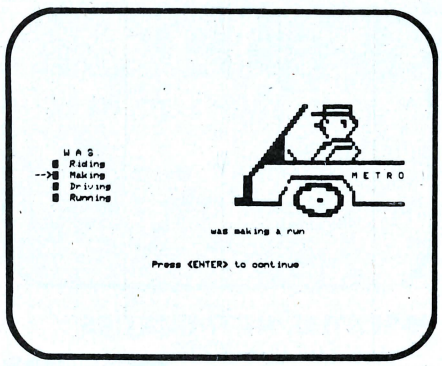
TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE P I

1 TRS-80 Color Computer Diskette, 32K; Backup....$50.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$50.00
Flash Spelling - Maintains a disk file of word lists. Words can be added, changed, or deleted from any of the files. Words are randomly selected and flashed on the screen. User then spells the word. 20 speeds. **Word Scramble** - Student unscrambles words randomly selected from word files. **Word Search** - Makes word puzzles from a list of words provided by the teacher. **Alphabetizing** - 3 levels of difficulty. **Word Adventure** - User tries to spell a word by choosing one letter at a time. Hero stands on a narrow ledge; ledge becomes more narrow if letter selected is not in the word; when user has spelled a word, h/she can swing across the pit safely.

SYNONYM/ANTONYM MATCH

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J

2 TRS-80 Color Computer Diskettes, 32K.....$41.90
1 TRS-80 Color Computer Cassettes, 16K.....$33.90
Strengthens and reinforces synonyms and antonyms while your student has fun! Programs hide a synonym or antonym behind each colored door. Student matches them and is rewarded by the computer. Guide.



STORY MIX SERIES

TRS-80 COLOR COMPUTER
DISKETTE P

Complete Series (6 Sets; 6 Diskettes).....$125.00
For beginning readers. Students compose their story by selecting story parts from a menu of four choices. Each story part is a meaningful phrase. Stories are composed by choosing answers to such questions as who, what and why. As each choice is made a picture is displayed. A portion of the story is given below the picture. Each story part is a chunk of meaning which enhances understanding and retention. Each program in the series focuses on a different theme. Color graphics and sound. Teacher's guide. A Micro School Program from Bertamax, Inc.

STORY MIX 1
STORY MIX 2 (At the Zoo)
STORY MIX 3 (Nursery Mix)
STORY MIX 4 (Animal Mix)
STORY MIX 5 (Going Places)
STORY MIX 6 (In and Out)

(Each title, 1 TRS-80 Color Computer Diskette, 32K$24.95)

VERB REVIEW

TRS-80 COLOR COMPUTER
DISKETTE I

1 TRS-80 Color Computer Diskette, 16K.....$22.95
Studies the past, present, and future tense of verbs, sentences presented with a choice of tense. Reinforcement throughout the program helps develop better English skills. Guide.

MATHEMATICS

CHANGE MAKER

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE P I

1 TRS-80 Color Computer Diskette, 32K; Backup....$25.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$25.00
Provides practice in making change. Student is given an amount of the purchase (less than $100) and the amount given in payment. Student makes change in the most efficient form.

ELEMENTARY MATH SERIES

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J

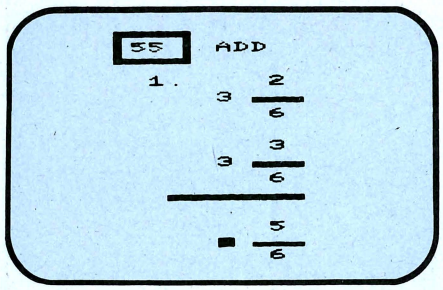
Complete Series (2 Sets; 2 Diskettes); Backup.....$95.00
Complete Series (2 Sets; 2 Cassettes); Backup.....$95.00

ELEMENTARY MATH 1
1 TRS-80 Color Computer Diskette, 16K; Backup....$45.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$45.00
Includes: **Place Value** - basic concepts; **Number Strings** - addition practice; **Math Drill** - all operations, user specifies type and number of problems; and **Speed Math Drill** - same as Math Drill, but with ten levels of speed.

ELEMENTARY MATH 2
1 TRS-80 Color Computer Diskette, 16K; Backup....$50.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$50.00
Includes: **Decimals** - basic concepts and drills; **Fractions** - introduction and drill; **Bagels** - student tries to guess 3-digit number; **Stones** - number games; and **Factor** - student learns factors of numbers.

S E P I J H C A LEVELS

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult



ESSENTIAL MATHEMATICS

TRS-80 COLOR COMPUTER
DISKETTE ■■[P][I][J]■■■

Provides drill and practice on essential mathematical skills. While not a complete mathematics curriculum, the program is designed to enable the user to review and master the essential mathematical skills necessary for more advanced work. **Features:** Highly motivational drill and practice with immediate reinforcement; Carefully graded sequence of skills; Extra activities at the end of many of the lessons; Teacher options for changing the length of lessons; Simple record keeping system; Early exit from the lesson if necessary. Color graphics and sound. Teacher's guide. A Micro School Program from Bertamax, Inc.

ESSENTIAL MATHEMATICS, Grade 1: Operations
1 TRS-80 Color Computer Diskette, 32K.....$39.95

ESSENTIAL MATHEMATICS, Grade 2: Operations
1 TRS-80 Color Computer Diskette, 32K.....$39.95

ESSENTIAL MATHEMATICS, Grade 3: Operations
2 TRS-80 Color Computer Diskettes, 32K.....$65.95

ESSENTIAL MATHEMATICS, Grade 4: Operations
2 TRS-80 Color Computer Diskettes, 32K.....$69.95

ESSENTIAL MATHEMATICS, Grade 5: Operations
2 TRS-80 Color Computer Diskettes, 32K.....$79.95

ESSENTIAL MATHEMATICS, Grade 6: Operations
2 TRS-80 Color Computer Diskette, 32K.....$79.95

ESSENTIAL MATHEMATICS, Grades 3-6: Fractions
1 TRS-80 Color Computer Diskette, 32K.....$59.95

ESSENTIAL MATHEMATICS, Grades 4-6: Decimals and Percent
1 TRS-80 Color Computer Diskette, 32K.....$59.95

ESSENTIAL MATHEMATICS, Grades 3-6: Number Concepts
1 TRS-80 Color Computer Diskette, 32K.....$59.95

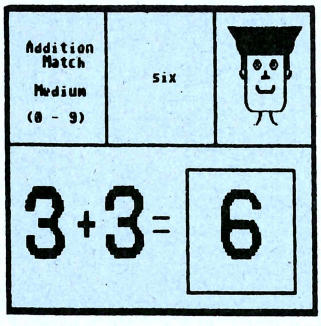
ESSENTIAL MATHEMATICS, Grades 6-8: Review
6 TRS-80 Color Computer Diskettes, 32K.....$225.00
Includes addition, subtraction, multiplication and division.

ESSENTIAL MATHEMATICS, Grades 6-8: Fractions
1 TRS-80 Color Computer Diskette, 32K.....$59.95

ESSENTIAL MATHEMATICS, Grades 6-8: Decimals and Percent
1 TRS-80 Color Computer Diskette, 32K.....$59.95

ESSENTIAL MATHEMATICS, Grades 6-8: Number Concepts
1 TRS-80 Color Computer Diskette, 32K.....$59.95

ESSENTIAL MATHEMATICS, Grades 6-8: Pre-Algebra
1 TRS-80 Color Computer Diskette, 32K.....$59.95



FACTS MATCH SERIES

TRS-80 COLOR COMPUTER
DISKETTE ■■[P][I]■■■■

Excellent for concept development and mastery of basic facts. In game-like setting, students match numerals with word names and combinations. Three levels of difficulty; four speeds of motion; graded sequence of facts. Color graphics and sound. Teacher's guide. A Micro School Program from Bertamax, Inc.

FACTS MATCH: Addition
FACTS MATCH: Subtraction
FACTS MATCH: Multiplication
FACTS MATCH: Division
(Each title, 1 TRS-80 Color Computer Diskette, 32K$24.95)

FRACTIONS/FRACTION DESTROYER

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE ■■■[I]■■■■

2 TRS-80 Color Computer Diskettes, 16K.....$46.90
2 TRS-80 Color Computer Cassettes, 16K.....$39.90
Fractions - *Side One:* explains fractions with the aid of graphics. Child studies the different ways fractions can be represented. Includes: improper, mixed and proper fractions. Educators have praised the use of motion and color to teach fraction equivalents. *Side Two:* Fraction practice, computer generated quiz. **Fraction Destroyer** - Fraction game. Student must destroy enemy submarine by finding the common denominator and the resultant numerators and adding or subtracting the fractions. Guide.

GRAPHING

TRS-80 COLOR COMPUTER
DISKETTE ■■■■[J][H]■■

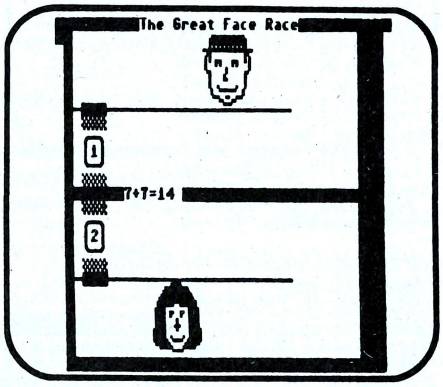
1 TRS-80 Color Computer Diskette, 32K; Backup....$46.00
Designed for use in a variety of mathematics classes. In **SLOPE**, students are able to investigate relationships between linear equations by entering up to five equations and seeing their graphs plotted on the screen. Using **Polar**, students can examine polar coordinate equations and their graphs without tedious point-by-point plotting. **Polygraph** allows students to plot quadratic, conic, and other equations commonly used in algebra, trigonometry, analytical geometry, and physics. In the educational game **Snark**, students develop strategies for locating a "snark" while they practice constructing circles on a coordinate system. **Radar** is a simulation in which students attempt to catch a runaway ship with a rescue boat. Students use angles of 0° to 359° to steer the rescue boat on a simulated radar screen. Teacher's guide.

MATH ACTIVITIES SERIES

TRS-80 COLOR COMPUTER
DISKETTE ■■[P][I]■■■■

4 TRS-80 Color Computer Diskettes, 32K.....$139.80
Motivating activities selected from Essential Mathematics which have been revised and improved and made available as separate games. Each of these highly motivating games encourages mastery of basic skills. Each level includes activities to reinforce number concepts, addition, subtraction, multiplication and division. 4 difficulty levels in each lesson.

Math Activities Grade 3
Math Activities Grade 4
Math Activities Grade 5
Math Activities Grade 6
(Each title, 1 TRS-80 Color Computer Diskette.....$34.95)



MATH FACTS GAMES SERIES

TRS-80 COLOR COMPUTER
DISKETTE ■■■[I][J]■■■

MATH FACTS GAMES I
1 TRS-80 Color Computer Diskette, 32K.....$34.95
To provide highly motivating practice on the 400 basic math facts in addition, subtraction, multiplication and division. The user may choose any operation or combiantion of operations at any one of four levels of difficulty. In Math Facts Games I the user plays agains the computer. Contents: Count-Down; The Secret Word; Tic-Tac-Toe; Great Computer Challenge. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH FACTS GAMES II
1 TRS-80 Color Computer Diskette, 32K.....$34.95
Fast action math fun. User plays against the computer or against another player. Two player games. Contents: Stop the Facts; Guide the Answer; Find the Answer; The Great Fact Race. Teacher's guide. A Micro School Program from Bertamax, Inc.

MATH FOR ALL AGES SERIES

TRS-80 COLOR COMPUTER
DISKETTE ■■[P][I][J]■■■

Complete Series (4 Sets; 16 Diskettes).....$450.00
A sequential, curriculum based mathematics program. Includes addition, subtraction, multiplication and division. Skills developed in the program include simple problems using pictures for easy understanding, speed drills for mastering basic facts, and complex problems involvng multiple digits and regrouping. Comprehensive teacher's guide contains reproducible testing materials. A student management system is included on each disk.

MATH FOR ALL AGES: ADDITION
4 TRS-80 Color Computer Diskettes, 32K.....$115.00

MATH FOR ALL AGES: SUBTRACTION
4 TRS-80 Color Computer Diskettes, 32K.....$115.00

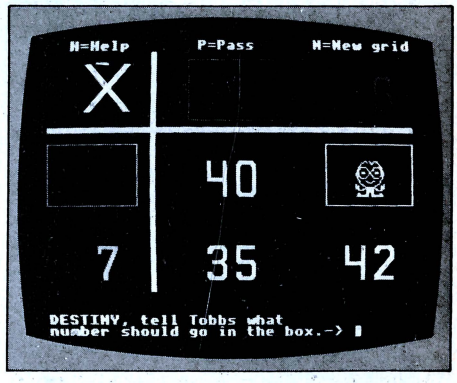
MATH FOR ALL AGES: MULTIPLICATION
4 TRS-80 Color Computer Diskettes, 32K.....$115.00

MATH FOR ALL AGES: DIVISION
4 TRS-80 Color Computer Diskettes, 32K..... $115.00

MR. BEAR COUNT/MR. BEAR MATH

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE ■■[E][P]■■■■■

2 TRS-80 Color Computer Diskettes, 16K.....$39.90
1 TRS-80 Color Computer Cassettes, 16K.....$31.90
Mr. Bear Count - A total of 12 counting objects are displayed. Your student will count either colorful trains or faces. Select sequential order or random order. **Mr. Bear Math** - Add and subtract with Mr. Bear. 9 levels, answers are entered from right to left. Guide.



PUZZLES AND PROBLEM SOLVING

(Teasers by Tobbs)

TRS-80 COLOR COMPUTER
DISKETTE ■■■[I][J][H]■■

1 TRS-80 Color Computer Diskette, 32K; Backup....$55.00
Noted as Exemplary Math/Science Courseware in **Classroom Computer Learning.** *Recommended for purchase by* **Booklist, Courseware Report Card.**
Challenging programs designed to help students think logically to solve addition and multiplication problems. Six levels of difficulty. Reinforces mental arithmetic skills. Helps students construct relationshps between mathematical operations. Demonstrates the distinction between what must be, what can be and what can't be. Teacher's guide.

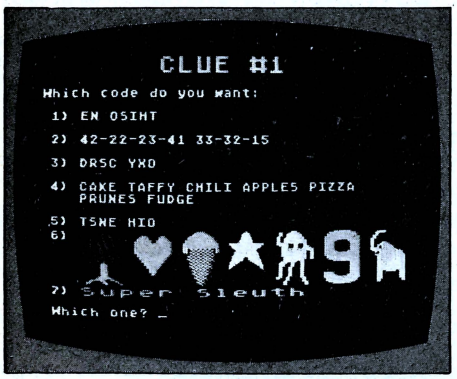
REDUCING FRACTIONS

TRS-80 COLOR COMPUTER
DISKETTE ■■■[I]■■■■

1 TRS-80 Color Computer Diskette, 16K.....$21.95
Exercises reinforce the changing of a fraction to lowest terms by dividing both numbers of the fraction by the same number. Guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult



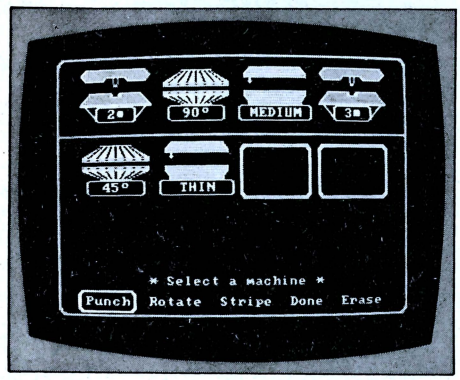
STRATEGIES IN PROBLEM SOLVING

TRS-80 COLOR COMPUTER
DISKETTE I J H

CODE QUEST: STRATEGIES IN PROBLEM SOLVING
1 TRS-80 Color Computer Diskette, 32K; Backup....$55.00
Students sharpen their thinking skills as they try to break a series of secret codes that reveal clues to the identities of mystery objects. Students or teacher can also enter their own mystery objects and clues. Develops the skills of discrimination, classification, and pattern identification. Provides practice in solving problems of varying complexity. Backup; teacher's guide.

FACTORY: STRATEGIES IN PROBLEM SOLVING
1 TRS-80 Color Computer Diskette, 32K; Backup....$55.00
Noted as Exemplary Math/Science Course in **Classroom Computer News.** *"...allows the student to experience problem solving techniques in order to obtain a final product."* **CHIME Newsletter, Aug/Sept 1983.**
Color graphics and animation. Challenges students to create geometric "products" on a simulated machine assembly line that they design. Focuses on problem-solving strategies, including working backwards, analyzing a process, determining sequence and applying creativity. Includes: **Test Machine** - Student tests the effects of three electronically simulated machines on a raw material. **Build a Factory** - Students set up an assembly line and watch it produce a product. **Make a Product** - Using their knowledge from the first two programs, students now enjoy the challenge of building a factory to duplicate a product shown on the screen. Backup; teacher's guide.

POND: STRATEGIES IN PROBLEM SOLVING
1 TRS-80 Color Computer Diskette, 32K; Backup....$55.00
A small green frog lost in a pond of lily pads, helps students recognize and articulate patterns, generalize from raw data and think logically. The student chooses from six ponds, or levels of difficulty, in which lily pads are displayed in increasingly complex patterns. Student's task is to determine the patterns that will get a frog across the pond. Students collect points by directing their frogs through as many ponds as possible with the fewest number of moves. Emphasis is on efficiency of pattern. Teacher's guide.



SOCIAL STUDIES

AMERICAN GOVERNMENT

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE J H

1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$45.00
Covers eight areas of American Government: Citizenship and Immigration; The Constitution; Legislative, Executive, and Judicial Departments; Electoral Process; State and Local Government. User may choose a review option or a quiz option. Backup; guide.

HISTORY AND GEOGRAPHY

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE I J

1 TRS-80 Color Computer Diskette, 16K; Backup....$50.00
1 TRS-80 Color Computer Cassette, 16K; Backup....$50.00
Regions of the U.S. - A drill and practice exercise. The user is asked what region of the United States randomly selected states are located in. **States and Capitals** - This program drills the student on randomly selected states and their capitals. If the student does not know the capital, the computer offers clues to help determine the capital. **Presidents** - A drill and practice on presidents of the U.S. **Country** - A drill and practice on countries and the continent they are located in. **Revolutionary War Quiz** - Two players compete in answering questions on the revolutionary war.

MARKET PLACE

TRS-80 COLOR COMPUTER
DISKETTE I J

1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
Helps illustrate elementary concepts in economics. Allows students to make and test decisions as they control business ventures. Each simulation focuses upon different aspects of the economic market place. In **Sell Apples**, the student attempts to determine the best price for selling apples based on the number sold. The **Sell Plants** program emphasizes the function of advertising. In **Sell Lemonade**, students must make decisions similar to those they would make running a real lemonade stand. The **Sell Bicycles** program examines the concept of supply and demand. Teacher's guide.

STATES OF THE UNION

TRS-80 COLOR COMPUTER
DISKETTE I J

1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
A map of the United States is displayed on the screen with one state flashing. Student is requested to identify this state. Detailed information (capital, population, area, population densities, rank in population and area, House members, Senate members, etc.) is presented to each state when it has been correctly identified or after three wrong guesses. Student's score and a summary of his/her weak areas maintained on disk for teacher refence. Guide.

U.S. GEOGRAPHY FACTS

TRS-80 COLOR COMPUTER
DISKETTE I J

1 TRS-80 Color Computer Diskette, 48K.....$39.95
Facts and information about our states, cities, landmarks, lands, waterways and climates. Lessons are broken into geographical areas such as Midwest, Pacific, and Great Lakes. Teacher's guide.

U.S. HISTORY FACTS

TRS-80 COLOR COMPUTER
DISKETTE J H

1 TRS-80 Color Computer Diskette, 48K.....$39.95
Designed to supplement any introductory course. Covers important dates, facts and events in a format that encourages easy recall. Teacher's guide.

MUSIC

MUSIC: COUNTING, NOTES AND RHYTHM

TRS-80 COLOR COMPUTER
DISKETTE I J

1 TRS-80 Color Computer Diskette, 32K; Backup....$46.00
Presents five drill and practice exercises for music theory concepts. **Counting** provides drill on time signatures, note types, and counting. **Wrong Note** provides practice in comparing written and audible pitch patterns. **Missing Note** is an exercise in elementary melodic dictation. In **Rhythm**, written and audible rhythm patterns are compared. **Rhythm Play** allows students to perform written rhythm patterns that appear on the screen. Includes student worksheets. Teacher's guide.

SCIENCE

EARTH SCIENCE

TRS-80 COLOR COMPUTER
DISKETTE I J H

1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
Examines a variety of physical phenomena. Using **Earthquake**, students locate an earthquake's epicenter in a simulated setting. **Minerals** is an aid that helps students identify 29 common minerals. The **Ursa** program teaches the identification of five major constellations of the Northern Hemisphere and provides a simulation that illustrates the use of the constellations for telling time. **Solar Distance** teaches the concept of distance in space by simulating trips to heavenly bodies using various methods of transportation. Teacher's guide.

ELEMENTARY SCIENCE FACTS SERIES

TRS-80 COLOR COMPUTER
DISKETTE I J

Supplementary material for elementary science classes. The topics are categorized into the broad branches of science education including: life science, earth/space science, and physical science. Teacher's guide.
ELEMENTARY SCIENCE FACTS, Grades 3-4
ELEMENTARY SCIENCE FACTS, Grades 5-6
ELEMENTARY SCIENCE FACTS, Grades 7-8
(Each title, 1 TRS-80 Color Computer Diskette, 48K$39.95)

OUTDOOR BIOLOGY

TRS-80 COLOR COMPUTER
DISKETTE P I J

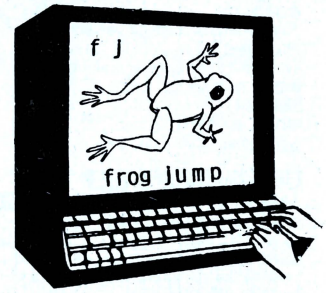
1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
Using the two simulations in *Outdoor Biology*, students take the role of an animal or a fish, encounter other organisms, and discover their place in a food web. Students can gain knowledge about competition for food sources, basic predator-prey relationships, and ecological systems. **Odell Lake** simulates the feeding conditions found in a North American lake while **Odell Woods** simulates feeding conditions found in a forested area surrounding a lake. Includes student worksheets. Teacher's guide.

BUSINESS EDUCATION

ALPHA ATTACK TYPING

TRS-80 COLOR COMPUTER
DISKETTE P I J

1 TRS-80 Color Computer Diskette, 16K.....$21.95
Game to speed typing. Practice only. Does not teach finger position. Student protects his/her headquarters which is being attacked by descending letters. Press the right key to explode attacking letter. Three levels. Guide.



JUNIOR TYPER

TRS-80 COLOR COMPUTER
DISKETTE P I

1 TRS-80 Color Computer Diskette, 32K; Backup....$45.00
A beginning typing program designed specifically for grades K-6. Teaches touch typing skills with the aid of innovative graphic devices that show the correct fingering for each letter. Students practice typing drills that use colorful graphic reward to make the work a little easier as they develop accuracy and speed. Teacher's guide.

TYPING TUTOR

TRS-80 COLOR COMPUTER
DISKETTE or CASSETTE J H

1 TRS-80 Color Computer Diskette, 48K.....$29.95
1 TRS-80 Color Computer Cassette, 48K.....$29.95
Great for the beginner. A keyboard in graphics appears on the screen, a letter is flashed and the student must press that key before the next one flashes or the score will suffer. Selectable speeds allow the student to progres at his or her own rate.

IBM-PC MICROCOMPUTER, General Information

The IBM Personal Computer (IBM-PC) contains 64K memory and uses the IBM-PC Disk Operating System or DOS. Software written for the IBM-PC is written for 64K machines. A newer version, the IBM-PC XT (XT stands for Extended) contains 128K memory and uses a 2.0 DOS. IBM software listed in this catalog comes in disk format and is designed to be used on the IBM-PC. Most programs designed for the IBM-PC will also operate on the IBM-PC XT. The IBM-PC*jr* is the newest IBM personal computer. It contains 64K memory. Many, but not all programs written for the IBM-PC will run on the PC*jr*. The content line, immediately below the software title will tell you whether the software will work on the IBM-PC, the IBM-PC*jr* or both.

Be sure to specify in your order whether you are using the IBM-PC or the IBM-PC*jr*.

ENGLISH

ALPHABET CIRCUS

IBM-PC/IBM-PCjr
DISKETTE [E][P]

1 IBM-PC (256K)/IBM-PC*jr* (128K) Diskette, 64K....$29.95

Six lively, entertaining games with a circus theme help students learn the alphabet. Includes: Meet the Circus, Lost Letter, Alphabet Parade, Secret Letter, Juggler, Marquee Maker. IBM-PC*jr* requires a BASIC cartridge. User's guide.

ARCADEMIC SKILL BUILDERS IN LANGUAGE ARTS

IBM-PC/IBM-PCjr
DISKETTE [I][J][H]

"...quick, imaginative and as alluring as any video game..." **Electronic Learning, Oct 1983.** *"...comes with an impressive packet of documentation."* **Softalk, July 1983.**

Learning is easy when students are having fun. Each of these six *arcade type games* provides a bright, fun approach to learning with practice and drill in vital language arts areas. Each game has nine different speeds and four levels of reading and vocabulary difficulty. The games run from one to five minutes, are either paddle or keyboard controlled, and can be used with or without sound effects. For students of all ages needing practice in the language arts. IBM-PC requires 128K and Color Graphics Monitor Adapter Card. IBM-PC*jr* requires 128K and Cartridge BASIC.

***Each $34.00 set includes 1 IBM-PC/IBM-PCjr, 128K Diskette and a user's guide.**

****Each $44.00 set includes 1 IBM-PC/IBM-PCjr, 128K Diskette with instruction sheet; 21 Duplicating Masters for worksheets; 3 Progress sheets; and a 28-page teacher's guide which provides specific data base for each game and complete instructions for program implementation.**

VERB VIPER.....*$34.00/**$44.00
Subject/verb agreement at four levels.

WORD INVASION.....*$34.00/**$44.00
Recognition of six parts of speech.

WORD MAN.....*$34.00/**$44.00
Word-building through patterns.

SPELLING WIZ.....*$34.00/**$44.00
Frequently used and commonly misspelled words.

WORD RADAR.....*$34.00/**$44.00
Sight word recognition.

WORD MASTER.....*$34.00/**$44.00
Antonyms, synonyms, and homonyms.

DRAGON'S KEEP

IBM-PC/PCjr DISKETTE [P][I]

1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95

"The game is fun; exciting things happen...both entertains and educates in a first class mannen...there is no killing, no zapping, no squishing and no injury in the entire game..." **Softalk, Feb 1983.**

A captivating adventure into dragon territory that develops reading comprehension. Any child who can read at the second grade level can play the game without help. Color Graphics Board required. User's guide.

EASY AS ABC

IBM-PC/IBM-PCjr
DISKETTE [E][P]

1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95

Five games that introduce the alphabet in a variety of fun and engaging ways. Children learn letter recognition, alphabetical sequence and upper and lower case. A Picture Menu makes it easy for children to select from match Letters, Dot to Dot, Leapfrog, Lunar Letters or Honey Hunt. A diskful of colorful animated graphics such as jumping frogs and buzzing bees keep children fascinated. Requires a Color Graphics Board. Teacher's guide.

ENGLISH ACHIEVEMENT SERIES

IBM-PC/IBM-PCjr
DISKETTE [H]

5 IBM-PC/IBM-PCjr Diskettes, 64K; Backup.....$175.00

"...the English Achievement series is a comprehensive package that should prove an excellent tool for both group instruction and individual student review." **Electronic Learning.**

Designed as a grammar practice for the College Entrance Examination Board's English Composition Exam, this distinguished series of programs is also an excellent English grammar tutorial and review for high school students. Sentences containing errors are presented in batches of sixteen. When the student gives an answer, s/he is told whether the answer is correct or incorrect. In either case, the error involved and a correct rewrite with an explanation is given. The part of the sentence which is incorrect is high-lighted. The student is given encouraging remarks that indicate progress. If s/he misses one type of error more than twice, this is shown. After each batch of sixteen sentences an analysis is given to indicate kinds of errors being made and approximate Achievement score. The student may choose to continue with another batch of sentences, and the analysis is updated. Since each program in the series presents a different format which appears on the CEEB's English Achievement Examination, we recommend purchase of the complete series for sucessful College Board preparation. Teacher's guide each set.

English Achievement I
English Achievement II
English Achievement III
English Achievement IV
English Achievement V

(Each title, 1 IBM-PC/IBM-PC*jr* Diskette, 64K; Backup.....$39.95)

GRAMMAR I

IBM-PC/IBM-PCjr
DISKETTE [I]

1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$45.00

Recognizing and reinforcing parts of speech. The program randomly selects sentences and displays them on the screen. Each time the student presses the space bar, the program will display a word from the sentence in a box being held by a robot. The student indicates what part of speech it is and presses the return key. If he is correct, the robot jumps up and down. Contents: Recognition of Adjectives, Verbs, Adverbs, Pronouns, Nouns; and Person, Place or Thing. Teacher's guide.

GRAMMAR EXAMINER

IBM-PC/IBM-PCjr
DISKETTE [I][J]

1 IBM-PC/IBM-PCjr Diskette, 64K.....$44.95

Climbing a newspaper hierarchy can be a fun way to learn grammar. Students begin as cub reporters with The Grammar Examiner newspaper and learn to edit stories, gradually moving up in position and salary until they become the Editor-in-Chief. But they must watch their grammar and deadlines. They could be presented with a paragraph to edit or a multiple choice grammar question they must answer. Teaches important grammar skills in a fun and exciting way. Includes punctuation, capitalization, subject-verb agreement, pronoun-antecedent agreement, verb tenses, adverb and adjective usage and homonyms. Multiple skill levels. Over 150 multiple choice grammar questions and paragraphs, each with numerous grammatical mistakes to be edited, are built into the program. Provides hours of grammar practice. Teachers may add their own grammar problems. Teacher's guide.

LEARNING ABOUT SOUNDS IN READING

IBM-PC/IBM-PCjr
DISKETTE [E][P]

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$39.95

Begins with phonics, the building blocks of reading skills. It introduces the sounds of vowels and consonants in reading: short vowels, long vowels and initial consonants, the phonics skills necessary for the beginning reader to develop successful reading or to help improve reading of older students. User's guide.

LETTERS AND WORDS

IBM-PC/IBM-PCjr
DISKETTE [E][P]

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95

For early letter and word practice. **Game One** teaches alphabetizing of letters. **Game Two** is for matching of upper and lower case letters. **Game Three** focuses on sight words via a word and picture matching activity. Requires Color Graphics Board. Teacher's guide.

MAGIC SPELLS®

IBM-PC/IBM-PCjr
DISKETTE [P][I]

1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

The most spell-binding spelling program around. Children unscramble and practice spelling words. Misty castles, devious demons and wise wizards guide children through a magical mystery tour of spelling. Teacher's notes. Requires double disk drive; IBM-PC*jr* requires BASIC cartridge.

Magic Spells is a trademark of The Learning Company.

MICRO SPEEDREAD

IBM-PC/PCjr DISKETTE [H]

3 IBM-PC/IBM-PCjr Diskettes, 128K.....$125.00

"What impresses us...are the developers' approach and the lessons' design and depth of detail...wise investment for those serious about improving their reading speed and comprehension to survive today's deluge of printed material." **InfoWorld, July 1984.**

Professionally developed. Ten learning modules approach speed reading as an information-gathering process. They offer in-depth explanations of techniques while providing extensive practice and practical applications. Provides reinforcement, encouragement and feedback as it employs speed reading strategies tested with students and professionals. Users proceed at their own pace. Pre- and post-testing evaluates current speed and comprehension, then adapts the program to meet the specific needs of the user. Comprehensive user's manual.

MISSING LINKS SERIES

IBM-PC/IBM-PCjr
DISKETTE [I][J][H]

Included in **A+ Software Supplement** *- more than seventy educational programs recommended by teachers. "...can help instill an appreciation of good books."* **Electron Learning, Feb 1984.** *"...stimulates students to think creatively about language..."* **Classroom Computer Learning, Jan 1984.**

A language puzzle that improves reading, writing, spelling, gammar and comprehension skills. Helps your students develop an appreciation of syntax, vocabulary and the mechanics of writing. It's a puzzle...it's a game! Students' educated guesses draw on their built-in knowledge about the succession of letters in words (word structure and spelling), the succession of words in sentences (grammar), the meaning of the whole (context) and a sense of literary style. **Writing Skills** are sharpened as the students develop a sense of the author's style and word selection. **Mechanics of Writing** improve as students receive immediate feedback on the correctness of their choices for grammar, sentence structure and spelling. **Reading Skills** increase as students learn to use context clues to solve the puzzle of what comes next and to extend their vocabularies in the search for the right word. Utilizes passages from a wide range of sources -- award-winning books, literature classics, poetry, sports, animals, world records and foreign-language texts and literature. Nine different formats of varying difficulty. Extensive teacher's guide with each set includes complete technical information, objectives and strategies.

MISSING LINKS: YOUNG PEOPLE'S LITERATURE
1 IBM-PC (64K)/PC*jr* (128K) Diskette; Backup.....$55.00
Recommended for purchase. **Creative Computing.**
Nine passages from nine classics. Includes selections from Wind in the Willows; Charlotte's Web; The Lion, the Witch and the Wardrobe; My Side of the Mountain; and Mrs. Frisby and the Rats of NIMH.

MISSING LINKS: LITERARY MICROANTHOLOGY
1 IBM-PC (64K)/PC*jr* (128K) Diskette; Backup.....$55.00
81 passages including the Bible, Hemingway, Thurber, Frost, Shakespeare, Freud, Solzhenitsyn, Ogden, Reid, Orwell and many more. One taste and you'll want to get the book and read more. Grades 8 and up.

MISSING LINKS: MICROENCYCLOPEDIA
1 IBM-PC (64K)/PC*jr* (128K) Diskette; Backup.....$55.00
Recommended for purchases. **Creative Computing.**
A potpourri of information, ranging from ice cream, elephants and bicycles to airplanes, whales and sharks plus much more. Grades 6 and up.

MISSING LINKS: ENGLISH EDITOR
1 IBM-PC (64K)/PC*jr* (128K) Diskette; Backup.....$65.00
Combines several samples from Young People's Literature, Literary MicroAnthology, MicroEncyclopedia, plus self-edit features. Allows you to select and enter passages of your choice to fit the interests of your students.

MISSING LINKS: SPANISH EDITOR
1 IBM-PC (64K)/PC*jr* (128K) Diskette; Backup.....$65.00
Provides excellent practice. Vocabulary and usage are impressed on the mind and memory in Spanish without tedious or artifical drill. Contains sample passages and clear instructions on how you can input the passages of your choice.

NEWSROOM

IBM-PC/IBM-PCjr
DISKETTE ■■■IJH■■

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$49.95

Lets you design, produce and print out your own newspaper for your family, club, class, or school. You can unleash your creativity (and for those who don't have loads of creativity, *The Newsroom* will help them look like they do) and create a newspaper with text and pictures that will look truly professional. Select from a library of over 600 pieces of clip art, combine them as you wish, alter them, or create your own unique pictures. Even add captions if you choose. Create distinctive banners. Position photos wherever you wish. Text will automatically rearrange itself around the photos. Completely control all design elements of your paper and print it on any popular computer printer using letter or legal size paper. 75-page illustrated Idea/Instruction Book. Requires double-sided disk drive and Color Graphics Board.

PUNCTUATION AND CAPITALIZATION, Grades 1-8: SERIES

IBM-PC/IBM-PCjr
DISKETTE ■■PIJ■■■

Complete Series (6 Sets, 6 Diskettes).....$174.95

User-oriented programs enable students to edit sentences to correct errors in punctuation and capitalization. No typing skill is required. Changes are made by selecting changes from a menu of choices. **Features:** Carefully graded sequence of skills; 10 lessons per grade level; Covers skills included in most standardized tests; Complete user control; Automatic error checking; Self scoring -- immediate feedback upon lesson completion; Examples given -- easy to use. Teacher's guide. Requires a Color Graphics Board. A Micro School Program from Bertamax, Inc.

PUNCTUATION AND CAPITALIZATION, Grades 1-3
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

PUNCTUATION AND CAPITALIZATION, Grade 4
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

PUNCTUATION AND CAPITALIZATION, Grade 5
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

PUNCTUATION AND CAPITALIZATION, Grade 6
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

PUNCTUATION AND CAPITALIZATION, Grade 7
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

PUNCTUATION AND CAPITALIZATION, Grade 8
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

READER RABBIT AND THE FABULOUS WORD FACTORY®

IBM-PC/PCjr DISKETTE ■EP■■■■■

1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95

A completely new approach to teaching pre-reading and early reading skills to tots. Children learn the essentials for reading. A playful, mischievous character in a bustling factory will inspire children to begin reading almost overnight. Requires double-sided disk drive. BASIC cartridge required for IBM-PCjr. Teacher's notes.

Reader Rabbit is a trademark of The Learning Company.

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REMEMBER
(Memory Skills)

IBM-PC/IBM-PCjr
DISKETTE ■■■■JH■■■

1 IBM-PC/IBM-PCjr Diskette, 128K.....$79.95

A powerful learning tool that every student from junior high through adult needs for studying and remembering facts, lists, sequences, and relationships. Powerful, yet easy to use. Promotes long-term retention required in a wide variety of subjects, including history, English, foreign languages, chemistry, biology, physics and other academic and non-academic subjects. Add whatever subject matter you need to study and, with the help of built-in instructions and tools for improving recall, you can practice and test yourself until you remember it all. Teacher's guide.

SPEED READER II

IBM-PC/IBM-PCjr
DISKETTE ■■■■■■H■■

2 IBM-PC/IBM-PCjr Diskettes 128K.....$69.95

Designed by reading specialists and tested on thousands of students. A complete reading development course which also measures your reading rate in words per minute with computerized reading tests; provides 35 interesting reading selections with quizzes to check comprehension; contains an easy-to-use editor for entering additional materials; and determines reading level with grade level analyzer. Can help double -- triple -- reading speed...and increase comprehension. Contains challenging lessons and exercises designed to replace poor reading habits with good ones, sharpen perception, increase eye span, and correct sluggish eye movements. BASIC cartridge required with IBM-PCjr. Teacher's guide.

SPEEDREAD PLUS

IBM-PC DISKETTE ■■■■JHCA

2 IBM-PC Diskettes, 128K.....$79.95

Uses time-proven techniques to train you to instantly recognize words and phrases. Exercises your peripheral vision, improves your eye movement and timing, and generally works with you at your pace. Offers four modes for reading text: single phrase for developing phrase recognition at high reading speeds; double phrase for developing eye movement and timing; random phrase for developing peripheral vision; and column phrase for training the eyes to read narrow text as found in newspapers and magazines with one-stop-per line. Allows selection of any combiantion of phrase widths and speeds with each of the four modes. Three classic texts provided for speed reading exercises: *Outcasts of Poker Flat* (Bret Harte); *Rip Van Winkle* (Irving); *Legend of Sleepy Hollow* (Irving). Other text can be entered as well as exam questions and answers to test comprehension. Teacher's guide.

SPELL-A-VISION

IBM-PC/IBM-PCjr
DISKETTE ■■■IJ■■■

8 IBM-PC/IBM-PCjr Diskettes, 64K.....$150.00

An independent study program for students who need to improve their spelling and vocabulary. There are 8 disks with 8,000 words. Each word has a sentence which defines or uses it. Teachers can enter their own spelling lists easily with built-in text editor in Volume 1. Optional sound. The records section displays student scores on each list. Each *Spell-A-Vision* volume has 1,000 words with sentences. Requires Color Graphics Board. Includes:

- Vol. 1: One Syllable Words
- Vol. 2: More One Syllable Words
- Vol. 3: Two Syllable Words
- Vol. 4: More Two Syllable Words
- Vol. 5: Sound Alikes
- Vol. 6: Three Syllable Words
- Vol. 7: Polysyllables
- Vol. 8: Challenging Words

SAT AND STANDARDIZED TEST PREPARATION

COMPUTER SAT

IBM-PC/IBM-PCjr Diskette

2 IBM-PC/IBM-PCjr Diskettes, 64K; Book.....$79.95

Here is the SAT preparatory course that can significantly raise actual test scores. And what's more -- It's Fun! Combines test-taking with diagnosis of results, prescription for improvement, and drill exercises for increased learning and speed. Includes detailed diagnostic appraisal of student performance in all test areas. Provides a section-by-section individualized study plan custom tailored to each student's needs. 540 drill items and 1000 electronic vocabulary flash cards provide immediate feedback and overall score. Presents successful strategies and builds general and test-taking skills. Each student controls the rate at which all material is presented. Progress directly correlated to the student's own ability. Slow learner does not fall behind and the advanced student can quickly leave those parts of the exam that are "too easy". Provides a series of explanatory strategies which not only explain a specific answer but develop general test-taking skills that insure future success. When students complete this program they will be totally prepared for the examination that lies ahead. They know what type of questions to expect and the proven stategies for answering them. They've had valuable practice that has significantly raised their level of performance. These students have developed the necessary test-taking skills that lead to a sense of calm and confidence on the day of the actual SAT. Includes a 470-page manual *"How to Prepare for the SAT"* and a User's Manual. Requires Basic Cartridge for IBM-PCjr.

COMPUTER SAT STUDY PROGRAM

IBM-PC/IBM-PCjr DISKETTE

3 IBM-PC/IBM-PCjr Diskettes, 128K; 3 Books.....$89.95

Barron's SAT preparation program from "the people who wrote the book". Includes 3 books (the main volume, a mathematics workbook and a verbal workbook), plus a user's manual. The software is interactive with the books. You read the question/problem in the book and indicate, on the computer the letter of your answer. The Sample Test, of which there are 3, gives you: the correct answer, a complete explanation of the correct answer, explanations of wrong answer choices (for verbal questions), problem-solving strategies (for math questions), and, a hint and a second chance to correct a wrong answer. Test Mode is timed just as on the actual SAT. Gives your score and an analysis of your strengths and weaknesses.

LOVEJOY'S PREPARATION FOR THE SAT

IBM-PC/IBM-PCjr

2 IBM-PC/IBM-PCjr Diskettes, 128K; Book.....$69.95

Provides comprehensive preparation for the SAT and the most up-to-date guide to college admissions, both from America's most trusted name in high-school guidance counseling. Includes: Two fully timed practice exams designed to accurately simulate the real SAT; 27 separate practice modules, on everything from analogies to trigonometry; Extensive help screens, including an on-scree "scratch pad" and four-function calculator; Utility program which both calculates projected SAT scores and creates bar-graphs of scores and progress; Over 120 pages of tips and strategies for taking the SAT; and An easy-to-use review format which shows the student both wrong and right answers...and why the correct answer is correct. Includes pocket edition of *Lovejoy's College Concise Guide.*

MASTERING THE COLLEGE BOARD ACHIEVEMENT TESTS: ENGLISH COMPOSITION

IBM-PC/IBM-PCjr

5 IBM-PC/IBM-PCjr Diskettes, 64K.....$175.00

This comprehensive, self-paced preparation program covers the four categories of questions found in the ECAT. It's filled with what students need to score better, and to reach their goal of college admission or advanced placement in college English. User's guide.

MASTERING THE SAT

IBM-PC/IBM-PCjr DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K.....$150.00

Gold Medal Award. **Creative Computing.**

A private tutor that helps college bound students score better on the Scholastic Aptitude Test. Developed in conjunction with the National Association of Secondary School Principals. Pre-tests students, points out weaknesses, then patiently and thoroughly helps strengthen those areas. Gives strategies on how to arrive at solutions. User's guide.

OWCAT SAT PREPARATORY 60-HOUR COURSE

IBM-PC/IBM-PCjr DISKETTE

9 IBM-PC/IBM-PCjr Diskettes, 128K.....$249.95

Educator designed to interest all students -- even the reluctant ones. Contemporary language, sound effects and graphics enliven the presentation. An optional feature allows students to practice with one another. 60-hour course includes four programs, each with 3 levels of difficulty. Teaches students to follow directions, familiarizes them with the kinds of questions they will face on the SATs, helps diagnose and strengthen areas of weakness by reviewing and correcting wrong answers. Programs include: **S.A.T. Verbal** - vocabulary, sentence completion, reading comprehension and analogies; **S.A.T. Math** - includes algebra and geometry; **Test of Standard Written English; P.S.A.T. Diagnostic Pre-Test.** Manuals accompany each program.

Also available:
OWLCAT SAT PREPARATORY 15-HOUR COURSE
4 IBM-PC/IBM-PCjr Diskettes, 128K.....$89.95
For students with limited time to study.

SAT SCORE IMPROVEMENT SERIES

IBM-PC/IBM-PCjr DISKETTE

Complete Series (3 Sets; 7 Diskettes).....$99.95

Three sets with 3 parts each, designed to help you raise your SAT scores. Includes both simulated SAT exams and complete reviews of each subject. Teacher's guide with each set. Requies BASIC cartridge for IBM-PCjr.

SAT SCORE IMPROVEMENT: SAMPLE TEST

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$19.95

Includes: Analysis of the SAT -- its organization and scoring, plus test-taking strategies and tips for raising one's score; a diagnostic-prescriptive Pre-Test for determining strengths and weaknesses in the Mathematical and Verbal sections of the SAT; sample SAT exams with complete Mathematical and Verbal sections timed and formatted according to the latest SATs and scored on the SAT scale.

SAT SCORE IMPROVEMENT: VERBAL

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$39.95

Includes: Thorough review of antonyms, analogies, and sentence completions, and strategies and practice in reading passages and responding to questions about the material just read.

SAT SCORE IMPROVEMENT: MATH

3 IBM-PC/IBM-PCjr Diskettes, 128K.....$39.95

Includes: Instruction and practice in solving the entire range of algebra problems found on the SAT; instruction and practice in solving geometry problems; and a Quantitative Comparisons and Word Problems section which covers all the remaining subjects in the Mathematical section of the SAT.

SPELL IT

IBM-PC/IBM-PCjr
DISKETTE
I J

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Teaches spelling rules and provides an effective format for making spelling easy and fun. Includes four exciting learning activities: **Mastering Commonly Misspelled Words; Challenge Yourself** - a unique word scramble game; **Review the Spelling Rules** - as you spell the word, so you learn to spell other words more easily, too; **Captivating Arcade Game;** and easy-to-use editor so you can enter your own lists of words for all four Spell It activities. BASIC cartridge required for IBM-PC*jr*. Teacher's guide.

SPELLING GAMES

IBM-PC/IBM-PCjr
DISKETTE
P I J H

SPELLAGRAPH
1 IBM-PC/IBM-PCjr Diskette, 64K.....$39.95
The challenge of figuring out rebuses (word/picture puzzles) adds excitement to spelling practice. Comes with over 400 words from grade 2-8. Spelling activity is based on the self-corrected test. Each word comes with a context sentence. Create your own word lists and sentences. Multiple skill levels. Requires Color Graphics Board; color monitor recommended. Teacher's notes.

SPELLAKAZAM
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Race the magician and release hidden animals. Colorful, lively animation and sound effects. Over 400 words. You can create your own word lists and sentences. Each word comes with a context sentence. Divided into grade levels 2-8. Multiple skill levels provide increasing challenge. Requires Color Graphics Board; color monitor recommended. Teacher's notes.

SPELLICOPTER
1 IBM-PC/IBM-PCjr Diskette, 64K.....$39.95
Discover secret words with an action spelling game of 400 words in 40 lists. From grade 1-adult. Provides a context clue with each word. Students gain points for spelling words correctly and lose points for misspelling. You can create your own word lists and clues. Perfect for spelling lessons, or making quiz games from classroom content. Lively sound effects and animation. Requires Color Graphics Board; color monitor recommended. Teacher's notes.

SPELLING IN CONTEXT, Grades 1-8 SERIES

IBM-PC/IBM-PCjr
DISKETTE
P I J

Complete Series (8 Sets; 8 Diskettes).....$250.00
A most useful method of teaching spelling. Learning to spell a word in the context of a sentence helps provide meaning to the word, and providing meaning for the word should increase the chance it will be remembered. In this program, each word is flashed on the screen for a brief time. The period of time is chosen by the user. Then the word disappears and a sentence is displayed. The sentence has a blank where the letters of the word will appear as the user types them. The user types the word and presses the ENTER keys. If the word is correct, a positive message is given. If the word is misspelled, one of several corrective messages, like "TRY AGAIN" is given. If a second error is made on the same word, the correct spelling of the word is given. The user is required to spell the word correctly before the next word is presented. Each misspelled word is recorded by the computer. If the user scores less than 90 percent correct on the lesson, the misspelled words are reviewed at the end of the regular lessons. In this way, the user is given several chances to practice spelling words correctly. Teacher's guide. Color Graphics Board required. A Micro School Program from Bertamax, Inc.

SPELLING IN CONTEXT, Grade 1
1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95
28 lessons, 280 words.

SPELLING IN CONTEXT, Grade 2
1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
40 lessons, 400 words.

SPELLING IN CONTEXT, Grade 3
1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
40 lessons, 600 words.

SPELLING IN CONTEXT, Grade 4
1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 5
1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 6
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 7
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
40 lessons, 800 words.

SPELLING IN CONTEXT, Grade 8
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
40 lessons, 800 words.

SPELLING SERIES

IBM-PC/IBM-PCjr
DISKETTE
P I J

Complete Series (7 Sets; 7 Diskettes).....$279.65
Multi-grade level spelling program based on the test/teach/test format. A pre-test determines which words need to be learned. Learning activities follow the pre-test. A post-test checks spelling and comprehension. Includes 4,000 commonly used words. Teachers may also enter their own word lists. User's guide with each set.

SPELLING GRADE 2
SPELLING GRADE 3
SPELLING GRADE 4
SPELLING GRADE 5
SPELLING GRADE 6
SPELLING GRADE 7
SPELLING GRADE 8
(Each title, 1 IBM-PC/PC*jr* Diskette, 128K.....$39.95)

STORY MAKER

IBM-PC/IBM-PCjr
DISKETTE
P I

1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95
This program is unique -- a creative story construction kit. A zany character guides children through all the steps necessary to create their title, name their character, write sentences with the built-in word processor, and create their own original illustrations. The story and graphics are then computer integrated and can be saved on an independent disk, complete with title and author's name. No limit to compositions (poems, graphs, class assignments, graphic illustrations) which can be created. Requires Color Graphics Board. User's guide.

STORY TREE

IBM-PC DISKETTE
I J

1 IBM-PC Diskette, 128K.....$39.95
"...offers a wide variety of ways to help get children hooked on writing, and reading..." **Personal Software, April 1984.**
Brings out the Mark Twain in every kid. Budding authors create their own mystery and adventure stories right on the computer screen, and a remarkable twist-a-plot feature lets them devise alternate choices for every turn of the plot. Color Graphics Board required. Teacher's guide.

THAT'S MY STORY/CREATIVE WRITING

IBM-PC/IBM-PCjr
DISKETTE
P I

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$59.95
Student authors enjoy the opportunity to write their own stories based on story starters. Through a branching program, players build their story trees as they write. This guided writing activity insures peer cooperation. One or more players. Requires a color graphics board. Teacher's guide.

WORD ATTACK

IBM-PC/IBM-PCjr
DISKETTE
I J H

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$49.95
A four-part vocabulary building system that makes learning new words interesting and fun. Contains 675 words with meanings and sentences illustrating usage, as well as an easy-to-use, versatile editor which allows you to add your own word lists. Words are presented on 9 different levels for students age 8 through adult. College-bound students will find it an especially effective way to gain points on the SAT. Students select from a variety of exercises: word display; multiple-choice quiz; sentence completion; or word attack, a fast action arcade game. All are educationally well-designed and graphically appealing to maximize learning and minimize drudgery. Classroom tested. BASIC cartridge required for IBM-PC*jr*. 44-page User's Guide.

WORD SPINNER®

IBM-PC/IBM-PCjr
DISKETTE
P I

1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95
Reading becomes like a ride in an amusement park as children spin through the alphabet and learn to read. With brilliant colors and a whirling word spinner the building blocks of reading are made easy. Requires double-sided disk drive and BASIC cartridge for IBM-PC*jr*. Teacher's notes.
Word Spinner is a trademark of The Learning Company.

S E P I J H C A **LEVELS**

S - Special Needs
E - Early Learning
P - Primary Grades
I - Intermediate Grades
J - Junior High
H - High School
C - College
A - Adult

WRITING SKILLS I

IBM-PC DISKETTE
H

1 IBM-PC Diskette, 128K.....$39.95
A practical approach to improving writing skills. Focuses on correcting the most common writing mistakes through editing. Features a built-in text editor which allows a person to correct written passages on the screen. The student edits several passages containing grammatical errors in the areas listed. The pretest measures the student's knowledge, and identifies the areas for study. Lessons on specific problem areas thus diagnosed teach by presenting information, asking questions, providing practice and testing skills. Ideal tool to help an adult or teenager improve writing skills through self-paced instruction. A grade book and class manager are included. Contents: Possessives and contractions; Noun plurals and possessives; Subject and verb agreement. Requires double-sided disk drive. Teacher's guide.

MATHEMATICS

ALGEBRA: BASIC SKILLS

IBM-PC/IBM-PCjr
DISKETTE
J H

Complete Series (7 Sets; 7 Diskettes); Backups.....$185.00
"...requires students to think independently as they interact with the tutorial program..." **Booklist, May 1, 1984.**
Excellent programs that go beyond drill and practice. Randomly generated exercises for each concept. The student uses the screen as a worksheet, solving the equations step-by-step on the screen. After each step the equation is updated. Student moves at his or her own pace. All errors are immediately flagged and explained. Complete error analysis after each set of problems. Extremely well designed and implemented. Teacher's guide with each set. Requires Color Graphics Board.

EQUATIONS I
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
This is an excellent program...I recommend the purchase of this product." **School Microwave Review, Summer 1982.** *"...easily used by people with limited computer knowledge."* **Minn. Dept. of Education High Quality Courseware List.**
Randomly generated equations in the form AX+B=C, where A, B and C are integers. All solutions are integer values. All errors immediately flagged and explained.

EQUATIONS II
1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$29.95
Generates linear equations in the form of AX+B=CX where A, B, C, and D are integers. Helpful feedback throughout program.

SOLVING QUADRATIC EQUATIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
"...simple and clear and will provide good reinforcement for students who need to develop skills in factoring quadratic equations. This is a program that does what it sets out to do." **Media Review, Feb 1983.**
Generates quadratic equations in the form AX2+BX+C=0 that are solvable by factoring. Detailed help given as needed.

BINOMIAL MULTIPLICATION
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
"...excellent method of drill and practice..." Minn. Dept. of Education High Quality Courseware List.
Provides practice in multiplying two binomials in the form (ax+b) (cx=d) where a, b, c, and d are integers. Tutorial help available as needed.

FACTORING ALGEBRAIC EXPRESSIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
"...format of this disk is one of the best I have seen." **Minn. Dept of Education High Quality Courseware List.**
Algebraic linear and quadratic expressions that are factorable. Allows student to experiment. Help immediately available as needed.

SIMULTANEOUS LINEAR EQUATIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
"...impossible not to complete the solution, because the program provides help at every step." **Mathematics Teacher, April 1984.**
Generates random linear equations that are solvable by addition or subtraction. After completion of the equation, the program shows a graphic representation of the solution allowing student to see the connection between the algebraic and graphic solution.

GRAPHING LINEAR FUNCTIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$29.95
"...an excellent piece of educational software. With its low price, it is highly recommended for every secondary mathematics classroom..." **Mathematics Teacher, May 1984.**
Practice in graphing linear functions in the form AX+BY=C (or some variation of that form). Graphics enhance student understanding.

ADDITION MAGICIAN®

IBM-PC/IBM-PCjr
DISKETTE P I

1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

An absent-minded magician makes a game out of learning addition. Magical walls and secret prizes encourage flexible thinking about adding. Children become addition magicians! For ages 6-10. IBM-PC*jr* requies BASIC cartridge and double sided disk drive. Teacher's notes.

ALGEBRA I SERIES

IBM-PC DISKETTE J H

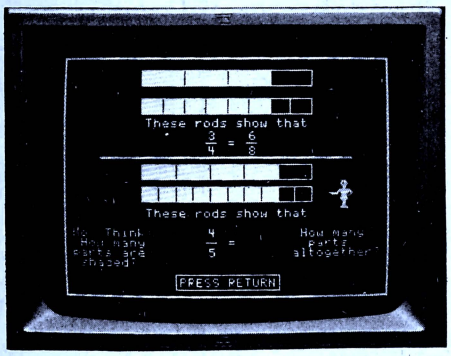
"This program should stand as an example for educational software writers...simulates the techniques used by the teacher in the classroom." **Courseware Report Card, Dec 1982.**

In each unit of Algebra I students may select one or more distinct "Learning Styles". A student may work sample problems, read a discussion of a concept, watch as an equation is solved step-by-step, or study the rules which govern an operation. Algebra I features color high-resolution graphics display, including upper/lower case text for maximum clarity. Flow-charted "information maps" mark the learner's progress by designating concepts learned, those still to be learned, and those that were troublesome. Requires color graphics board and a double sided disk drive.

ALGEBRA I, Part 1
1 IBM-PC Diskette, 64K.....$39.95
Contents: Definitions, Number Line Operations, Sets, Evaluating Expressions, Rules for Equation Reduction.

ALGEBRA I, Part 2
1 IBM-PC Diskette, 128K.....$39.95
Requires double sided disk drive system. Contents: Addition of Real Numbers, Multiplication of Real Numbers, Solving Equations and Problems, Solving Inequalities.

ALGEBRA I, Part 3
1 IBM-PC Diskette, 128K.....$39.95
Requires double sided disk drive system. Contents: Monomials, Polynomials, Simple Factoring, Factoring and Binomials, Quadratic Trinomials.



ARITHMETIC CLASSROOM SERIES

IBM-PC/IBM-PCjr
DISKETTE I J

Complete Series (9 Sets, 9 Diskettes).....$429.55

One of the best, most competent elementary classroom mathematics learning programs available. Developed by experienced highly competent educators, tutorially based. Every instructional unit is objective based -- making it easy to identify the specific skills on which students are working. Lessons begin with examples that include pictorial representation and explanation of the problem type. Practical problems follow each tutorial episode. Problems are randomly generated or drawn from large item banks, allowing students to repeat lessons without seeing a repetition of problems. Throughout the practice exercises, whenever an error is made, instructional hints are provided based upon the type of error made and the tutorial approach employed earlier. Students received strong positive reinforcement for correct responses. The Games package is available to provide additional practice. Consists of a total of eight self-contained but highly integrated learning packages -- one for each of the following, plus a Games package. Teacher's guide.

Each learning program contains: 1 IBM-PC/IBM-PCjr Diskette, 128K; Practice Exercises; Achievement Record Forms.

Arithmetic Classroom: Addition.....$49.95
Arithmetic Classroom: Subtraction.....$49.95
Arithmetic Classroom: Multiplication.....$49.95
Arithmetic Classroom: Division.....$49.95
Arithmetic Classroom: Fractions I.....$49.95
Basic Concepts
Arithmetic Classroom: Fractions II.....$49.95
Addition and Subtraction
Arithmetic Classroom: Fractions III.....$49.95
Multiplication and Division
Arithmetic Classroom: Decimals.....$49.95
Arithmetic Classroom: Games.....$29.95

ALGEBRA ARCADE

IBM-PC DISKETTE J H

1 IBM-PC Diskette, 64K; Book.....$49.95

An exciting game for learning and practicing Algebra at many different levels of difficulty. You create graphs that zap Algebroids thereby increasing your score. A complete rules and instruction booklet tells you how to get started and offers tips on strategy and winning equations. Students like this one.

ARCADEMIC SKILL BUILDERS IN MATH

IBM-PC/IBM-PCjr
DISKETTE P I J

"This package of math games turns math drill into sheer pleasure for children." **InCider, May 1983.**

The fast action and colorful graphics of an arcade game format will motivate students of all ages to learn fundamental math skills. Provides practice and drill in the four basic math operations and combinations of operations. The program range of numbers can be changed to practice basic facts with the numbers 0-3, 0-6, 0-9. Each game has 9 different speeds; runs from 1-5 minutes; and can be controlled with either paddles or keyboard. Requires Color Graphics Board and color monitor. IBM-PC*jr* requires BASIC cartridge.

***Each $34.00 set includes 1 IBM-PC/IBM-PCjr diskette, 128K, and a user's guide.**
****Each $44.00 set includes 1 IBM-PC/IBM-PCjr diskette, 128K, with instruction sheet; 12 blackline masters; Deck of full-color flashcards; 16-page teacher's guide.**

ALIEN ADDITIONS.....*$34.00/$44.00**
MINUS MISSION.....*$34.00/$44.00**
METEOR MULTIPLICATION.....*$34.00/$44.00**
DEMOLITION DIVISION.....*$34.00/$44.00**
ALLIGATOR MIX.....*$34.00/$44.00**
Addition and subtraction.
DRAGON MIX.....*$34.00/$44.00**
Multiplication and division.

DECIMALS MADE SIMPLE

IBM-PC/IBM-PCjr
DISKETTE I J H

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95

Topics covered include: Addition of Decimals, Subtraction and Multiplication of Decimals, Numbers, and Division of Decimal Numbers. Your students will learn: how to line up and add columns of whole and decimal numbers; how to calculate place values in the multiplicand, multiplier, and product; how to multiply whole and decimal numbers; and how to format decimal division problems. Requires color monitor. Teacher's guide.

ESTIMATION

IBM-PC/IBM-PCjr
DISKETTE I J

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00

Provides students with the opportunity to practice their estimation skills. The activities in this package include an introduction to estimating whole numbers and decimals and to estimating money in a shopping situation. Requires color/graphics capability and advanced BASIC. Teacher's guide.

ESSENTIAL MATHEMATICS SERIES

IBM-PC/IBM-PCjr
DISKETTE I J

Provides drill and practice on essential mathematical skills. While not a complete mathematics curriculum, the program is designed to enable the user to review and master the essential mathematical skills necessary for more advanced work. **Features:** Highly motivational drill and practice with immediate reinforcement; Carefully graded sequence of skills; Extra activities at the end of many of the lessons; Teacher options for changing the length of lessons; Simple record keeping system; Early exit from the lesson if necessary. Teacher's guide. Color Graphics Board required. A Micro School Program from Bertamax, Inc.

ESSENTIAL MATHEMATICS, Grade 3: Operations
1 IBM-PC/IBM-PCjr Diskette, 128K.....$65.95
ESSENTIAL MATHEMATICS, Grades 6-8: Fractions
1 IBM-PC/IBM-PCjr Diskette, 128K.....$59.95
ESSENTIAL MATHEMATICS, Grades 6-8: Decimals and Percent
1 IBM-PC/IBM-PCjr Diskette, 128K.....$59.95
ESSENTIAL MATHEMATICS, Grades 6-8: Number Concepts
1 IBM-PC/IBM-PCjr Diskette, 128K.....$59.95
ESSENTIAL MATHEMATICS, Grades 6-8: Pre-Algebra
1 IBM-PC/IBM-PCjr Diskette, 128K.....$59.95
ESSENTIAL MATHEMATICS, Grades 6-8: Review
6 IBM-PC/IBM-PCjr Diskettes, 128K.....$225.00

FRACTION FACTORY

IBM-PC DISKETTE P I J

1 IBM-PC Diskette, 64K.....$29.95

Colorful graphics and musical sounds help children see and understand fractions and fractional parts. Students learn to find equal values with different denominators, and are soon learning to add, subtract and multiply fractions. The graphics provide clear examples of what the numbers mean, and when children understand that, then fractions make sense. Color Graphics Board required.

FRACTION FEVER

IBM-PCjr CARTRIDGE P I

1 IBM-PCjr Cartridge.....$24.95

Combines a fast-paced arcade game with a learning game. As you hop along on your pogo stick, you'll be searching for the picture-fraction that matches the fraction at the top of the screen. Spot the correct fraction and ride the Fraction Elevator up to higher floors. Eliminate incorrect fractions along the way and add to your point score. Different visual representations of fractions. Colorful graphics and sound. User's guide.

FRACTIONS OPERATIONS

IBM-PC/IBM-PCjr
DISKETTE I J

Complete Series (4 Sets, 4 Diskettes).....$90.00

Well designed programs. All work done on the screen. Exercises are randomly generated and all errors are immediately flagged and explained. Use of split screen provides work space and simultaneous instructions and/or error messages for optimum feedback. Teacher's guide.

ADDING FRACTIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$24.95
"...a useful additon to a software collection." **Mathematics Teacher, March 1983.**
Excellent practice in adding fractions with uncommon denominators.

SUBTRACTING MIXED FRACTIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$24.95
"...excellent and quick to the point...excellent treatment of the lowest common denominator." **Microsift, April 1984.**
Problems are composed of positive mixed fractions less than 10.

MULTIPLYING FRACTIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$24.95
"The consistency and simplicity with which this program operates makes it a valuable resource to support a middle school or junior high school mathematics program." **Media Review, Feb. 1983.**
Practice in multiplying fractions and in cancelling or reducing.

DIVIDING FRACTIONS
1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$24.95
Excellent practice in dividing fractions.

GRAPHING

IBM-PC/IBM-PCjr
DISKETTE I J

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00

Introduces graphics programming on the computer through the use of ordered pairs with both positive and negative numbers. Students use the computer to review ordered pairs, to plot lines on a coordinate system, and to plot simple graphic figures. The central idea of the package is to show how ordered pairs are used in creating computer graphics. Requires color/graphics capability and advanced BASIC. Teacher's guide.

HOT DOG STAND: SURVIVAL MATH SKILLS

IBM-PC/IBM-PCjr
DISKETTE J

1 IBM-PC (64K)/PCjr (128K) Diskette; Backup.....$55.00

Students practice math skills when they run this simulated hot dog stand at their school's football games. They purchase food and set prices on the basis of anticipated crowd size and weather conditions. Provides practice in calculating and estimating with whole numbers, decimals and fractions. Helps apply mathematics to practical decision making. Color graphics and animation give visual spark and a dimension of realism to the program. Color Graphics Board required. Teacher's guide.

MATH BLASTER

IBM-PC/IBM-PCjr
DISKETTE P I

1 IBM-PC/IBM-PCjr Diskettes, 128K.....$49.95

Contains over 600 problems in addition, subtraction, multiplication, division, fractions and percents as well as an easy-to-use, versatile editor which allows you to add your own sets of facts. Excellent for math facts, both learning and drill, with a fun game to test skills. Helps students memorize math facts that are essential to building basic math skills, improve their accuracy, and increase their speed. The problems are grouped in "families of facts" and can be used with four different learning activities, including a fast-action arcade game. Classroom tested. 60-page user's guide. IBM-PC*jr* requires BASIC cartridge.

HIGH SCHOOL MATH

IBM-PC/IBM-PCjr
DISKETTE ■■■■■H■■

NOTE: This is also useful for advanced junior high students or for remedial study and review at the college level. Programs provide instruction and then generate randomized problems from a large bank of exercises. The student supplies the final answer. (Students may or may not need to use pencil and paper to do intermediate figuring.) Therefore, faster students need not go through every step of every problem before they can get to the answer, and slower students can work out answers at their own pace, seeing the figures on paper. Every incorrect problem is explained and all the intermediate steps are shown for the problems that are answered wrong. The computer keeps track of the number of problems attempted and the number correct. Attractive use of color and graphics makes the problems more enjoyable. Teacher's guide with each set.

HIGH SCHOOL BASIC MATH
1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95
Whole numbers, order of operations, decimals, fractions, percents, ratios and proportions.

HIGH SCHOOL BASIC ALGEBRA
1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95
Integers, absolute value, rational numbers, polynomials, graphing inequalities on a number line, solving first degree equations and inequalities and algebraic fractions.

HIGH SCHOOL GEOMETRY
1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95
Types of angles, parallel and intersecting lines, polygons, perimeters, areas, volumes, circles and the Pythagorean Theorem.

HIGH SCHOOL INTERMEDIATE ALGEBRA
1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95
Exponents, radicals, solving quadratic equations, graphing lines, the distance formula, solving systems of equations, logarithms, and sequences.

HIGH SCHOOL PROBLEM SOLVING
1 IBM-PC/IBM-PCjr Diskette, 128K.....$29.95
Strictly designed to teach methods of solving "applications" or "story" problems. Integer problems, geometric problems, averages, age problems, distance problems, work problems, coin problems, mixture problems, permutations and combinations.

MATH WORLDS: EXPLORING MATHEMATICS WITH COMPUTERS

IBM-PC/IBM-PCjr
DISKETTE ■■■■■J■H■■

5 IBM-PC/IBM-PCjr Diskettes, 128K; Book.....$249.95
Outstanding Software Award 1985. **Classroom Computer Learning.**

Adapted from materials developed under the Math Network Curriculum Project. The student is drawn into exploring the world of mathematics when computer-generated situations require that math be used as a tool. For example:

* Students learn to use algebra as a tool in a world where things happen only if the student can express him or herself using an algebra-like language to tell the computer what to do.
* Sampling and simple probability concepts become real problem-solving tools if the student can use them to schedule television prime time shows, competing against computer generated schedules.
* Scatter plots and bar graphs take on a new meaning when students can use them to explore the demography of the population of an alien planet, Ugizi.
* Students can apply principles of symmetry and geometry to create fascinating pictures using a turtle graphics language.

Includes 7 units of instruction each designed for about two weeks instruction. A detailed teacher's guide included with each unit. Requires color graphic card; color monitor optional.

MISSION: ALGEBRA

IBM-PC/IBM-PCjr
DISKETTE ■■■■■J■H■■

1 IBM-PC/IBM-PCjr Diskette, 64K.....$44.95
Your sister ship has crashed on an asteroid, and you must find her. To discover her path, you must determine the equation of a line, because her communication computer is malfunctioning. Then, you must solve for "Y" to find the coordinates for a point on her path. Moving to the screen which displays the stellar map, you plot the stellar coordinate (x,y coordinate pair). Solve the problem correctly and win points. Occasionally, the communication computer comes back to life, and you get a chance to guess the next point in the path, which adds excitement to the game. A comprehensive learning tool with thousands of linear algebra problems of varying difficulty levels generated by the program. Workspace is provided on the screen to help solve the equations, and with each step you make toward solving the equation, you receive immediate feedback. Help is available with the press of a key. Specific explanations and examples of steps you can take to solve the problem are provided. Comprehensive teacher's manual.

NUMBER FARM

IBM-PC/IBM-PCjr
DISKETTE ■■E■P■■■■■

1 IBM-PC (256K)/IBM-PCjr (128K) Diskette.....$29.95
Six lively, entertaining games with a farmyard theme help students with counting, number skills and numeral recognition. Good graphics. Includes Number Farm, Hen House, Old McDonald, Animal Quackers, Horseshoes and Crop Count. IBM-PC*jr* requires BASIC cartridge. User's guide.

NUMBER STUMPER®

IBM-PC/PCjr DISKETTE ■■■P■I■■■■

1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
A compellingly clever way to think about numbers. Children develop abstract reasoning and strategic thinking skills by adding and subtracting. Clicking dice and pot o'gold charm any child. Requires BASIC cartridge and double-sided disk drive for IBM-PC*jr*. User's guide.
Number Stumper is a trademark of The Learning Company

PIECE OF CAKE

IBM-PC/IBM-PCjr
DISKETTE ■■■P■■■■■

1 IBM-PC/IBM-PCjr Diskette, 64K.....$34.95
Math games based on a magical bakery where children learn to add, subtract, multiply and divide by keeping count of cakes as they come from the oven and are sold to customers. Students add and subtract total or figure the number of slices by multiplying and dividing. The game demands fast work to keep the cakes from falling on the floor, so math skills become important. If a student has trouble, the bakers will help and explain how to do the problem. Color Graphics Board required.

PRIME NUMBERS

IBM-PC/IBM-PCjr
DISKETTE ■■■■■J■■■

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
Prime numbers have many uses in mathematics. This package demonstrates the use of the computer as a tool in the study of mathematics. Students are encouraged to hypothesize about the nature of the prime number series and test these hypotheses on the computer using the **Primes, Tau,** and **Prime Factors** programs. The concept of algorithms is introduced both in a computer program and in the method used to determine primes. In the **Factor Fiend** program, the students' ideas about prime factors and prime numbers are challenged in a game-like competition. Requires color/graphics capability and advanced BASIC. Teacher's guide.

PROBABILITY

IBM-PC/IBM-PCjr
DISKETTE ■■■■I■J■■■

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
The study of probability is greatly enhanced by using a computer. The computer can easily simulate probabilistic events, producing the outcome within seconds. Also, it can prepare a listing of outcomes. The **Flipping a Coin, Rolling a Die,** and **Sum of Two Dice** programs illustrate the large number and multiplication principles of probability. A probability worksheet and quiz are contained in the teacher's guide. Requires color/graphics capability and advanced BASIC.

PROBLEM SOLVING IN MATH SERIES

IBM-PC/IBM-PCjr
DISKETTE ■■■■I■■■■

Helps students learn a variety of skills to aid in solving math problems such as reading carefully and paying attention to details. looking for clues, learning clue words for mathematical operations, identifying the goal, and using systematic trial and error strategy. Teacher's guide each set. Requires Color Graphic Board. A Micro School Program from Bertamax, Inc.

PROBLEM SOLVING IN MATH, Grade 3
3 IBM-PC/IBM-PCjr Diskettes, 128K.....$169.95

PROBLEM SOLVING IN MATH, Grade 4
3 IBM-PC/IBM-PCjr Diskettes, 128K.....$169.95

SPACE MATH

IBM-PC/IBM-PCjr
DISKETTE ■■■P■I■■■■

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
As Moonbase commanders, the players try to stop evil aliens of the planet Zorlyn from conquering Earth. Answering computation questions allows players to shoot at the Zorlyn's spaceships. This program generates a vast amount of possible addition, subtraction, multiplication, and division computations, bound by the parameters specified by the teacher. 1-6 players. Requires a color graphics board. Teacher's guide.

SUCCESS WITH MATH SERIES

IBM-PC DISKETTE ■■■P■I■J■■■■

Students who want to get ahead in math -- or, students who want to catch up -- will find these classroom-tested programs add up to positive results! Step-by-step tutor that actually communicates with children, pointing out errors, explaining rules, and complimenting students for a job well done. User's guide.

SUCCESS WITH MATH: ADDITION/SUBTRACTION
SUCCESS WITH MATH: MULTIPLICATION/DIVISION
(Each title, 1 IBM-PC Diskette, 64K.....$24.95)

TAKING THE MYSTERY OUT OF METRICS

IBM-PC/IBM-PCjr
DISKETTE ■■■■■J■H■■■

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
A Master Teacher's Program. Topics covered include; reading and using a metric ruler; calculating perimeters; measuring and calculating areas and calculating density of objects. Your students will learn: how to read and use a metric ruler; how to convert metric distance measurements to different metric units; how to convert millimeter to centimeter, centimeter to decimeter, decimeter to meter; and how to calculate the area of figures with equal or unequal sides. Requires color monitor. Teacher's guide.

TELEMATH SERIES

IBM-PC/IBM-PCjr
DISKETTE ■■■P■I■J■■■■

Complete Series (10 Sets; 10 Diskettes).....$245.00
High quality arcade-style graphics and fun, competitive games make this math practice popular with students. Teachers appreciate the Award-winning, learning-validated content. Each game reinforces at least one basic math skill. Four games per disk with built-in teacher options. Games may be played against the computer or against other students, individually or as teams. Complete teacher's guide with each set. Requires color graphics board.

TELEMATH, Volume 1 *Grades 2-3*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Sequencing numbers; addition practice.

TELEMATH, Volume 2 *Grades 3-6*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Geometric shapes; subtraction practice; sequencing numbers.

TELEMATH, Volume 3 *Grades 3-6*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Plotting points on a plane; identifying points, lines, line segments, rays and angles; changing money; measuring lengths to nearest whole, half, or quarter inch or centimeter.

TELEMATH, Volume 4 *Grades 4-6*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$40.00
Dividing and multiplying practice; computing volume of the rectangular prism.

TELEMATH, Volume 5 *Grades 3-6*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Place value of decimals in tenths, hundredths, and thousandths; subtracting fractions; multipying and dividing practice.

TELEMATH, Volume 6 *Grades 5-7*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Subtracting fractions and mixed numbers; parallelograms or right triangles; converting fractions to decimals and vice versa; determining averages.

TELEMATH, Volume 7 *Grades 4-8*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Multiplying fractions and mixed numbers; equivalent fractions; area of a rectangle; multiplying whole number and decimals.

TELEMATH, Volume 8 *Grades 4-8*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Division with decimals; addition with decimals; converting fractions to percentages and vice versa; multiplying fractions and mixed numbers.

TELEMATH, Volume 9 *Grades 4-8*
1 IBM-PC/IBM-PCjr Diskette, 48K.....$29.95
Subtracting fractions with unlike denominators; percentages; dividing with fractions and mixed numbers; subtracting mixed numbers with unlike denominators.

TELEMATH, Volume 10 *Grade 8*
1 IBM-PC/IBM-PCjr Diskette, 64K.....$29.95
Dividing a 2-digit integer by a 1-digit factor with like or unlike signs; adding 2-digit integers; multiplication with like or unlike signs; subtracting 2-digit integers with like or unlike signs.

TRAP-A-ZOID

IBM-PC/IBM-PCjr
DISKETTE ■■■I■J■■■■

1 IBM-PC/IBM-PCjr Diskette, 64K.....$39.95
Use geometry concepts to trap zoids from space. Practice geometry concepts while playing a game with colorful, lively animation and sound effects. Gain points by answering questions before the Zoid escapes. Includes concepts as basic as square and triangle and as complex as scalene and isosceles. Reinforcement for older students or challenge for younger students. Multiple skill levels. Color Graphics Board required. User's guide.

SCIENCE

BODY TRANSPARENT
IBM-PC/IBM-PCjr
DISKETTE [I][J][H]
1 IBM-PC/IBM-PCjr Diskette, 64K.....$44.95
An entertaining game which teaches the names, locations and functions of organs and bones of the human body, plus important facts about them. Allows teachers to add their own questions and vary the difficulty levels of game play and anatomy skills independently. User's guide.

DINOSAUR DIG
IBM-PC/PCjr DISKETTE [I]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$39.95
Endorsed by the **Smithsonian Institution** *for its excellence.*
An electronic journey back into geologic time during which kids explore and learn all about dinosaurs, from where they lived to why they died. Includes time line game in which kids learn which dinosaurs lived when. Comes with Easy Key overlay which converts the keyboard to a series of function keys. Color Graphics Board required. Teacher's guide.

EXPLORING THAT AMAZING FOOD FACTORY, THE LEAF
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Program. Includes excellent graphics. Topics covered: transport in the leaf, structure of the leaf, and stomate action in gas exchange. Students will learn: the external parts of a typical leaf; how food, water, and minerals are carried by all parts of the plant; what materials are needed for photosynthesis to take place -- and what its by-products are; and what cutin, epidermis, palisade layer, spongy layer, stomata, guard cells, chloroplasts are -- and what they do. Requires color monitor. Teacher's guide.

FASCINATING STORY OF CELL GROWTH
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Program. Excellent graphics. Includes: surface area/cell volume; experimenting with cell size; chromosomes in cell division; and stages of mitosis. Students will learn: to identify the parts of a cell; what mitosis is, and how it increases the surface areas of cells; the most important factor determining what an organism looks like; and what homologous chromosomes, daughter cells, parent cells, replication are -- and what they accomplish. Requires color monitor. Teacher's guide.

FORECAST!®
IBM-PC/IBM-PCjr
DISKETTE [I][J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Students can now predict tomorrow's weather with this weather station. Employing the same methods used by professionals to track storm fronts, chart weather patterns and stay on top of the weather. *Forecast!* unlocks the mysteries behind weather prediction and helps students develop an understanding of how atmospheric conditions interact to produce the weather. Developed by nationally recognized professional meteorologists, *Forecast!* provides scientific explanations for weather conditions in addition to forecasting the weather itself. Comprehensive program guide.

GRAVITY SIMULATION
IBM-PC DISKETTE [H][C]
1 IBM-PC Diskette, 64K.....$40.00
You can set up situations in astronomy and see what will happen. Is a planet stable if it orbits one star of a binary pair? Why does one satellite have to slow down in order to catch up with another satellite in front of it? Why do space probes passing Jupiter say that they get a boost on their way to other planets? The program allows up to nine objects on screen at once. Their mass, speed, etc. can be changed at any time. Snapshots can be sent to the printer if one is available. 70-page manual with detailed sample problems and ideas for using the program. Requires Color Graphics Board.

HOW PLANTS GROW: THE INSIDE STORY
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Program. Excellent graphics. Includes growth and root tip of the plant; stem cross section, terminal bud, and plant hormones. Students will learn: how plant growth begins; cell division; how water and food are carried throughout the plant; meaning of merismatic tissue, xylem, phloem, cortex tissue, palisade cells; and what causes leaves to fall, fruit to form, and flower buds to open in specific patterns. Requires color monitor. Teacher's guide.

MASTERING UNITS OF MEASUREMENT
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Program. Topics covered include: units of measurement, changing between units, converting metric measures, the graduated cylinder and measuring liquids, solids, gases. Your students will learn: how to change from one monetary unit to another; how to convert metric units: kilometers, hectometers, decameters, meters, decimeters, centimeters, millimeters; and how to calculate how much solids weigh. Requires color monitor. Teacher's guide.

MIGRATING MOLECULES: HOW'S AND WHY'S
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Program. Topics covered include: transport through a membrane, structure of molecules, equilibrium and osmosis and the process of diffusion. Your students will learn: what porosity and diffusion are; what osmosis is and how it takes place; what matter, atoms, elements, compounds, molecules are and the characteristics of each; how to identify and interpret fomulas; and what factors control the movement of molecules. Requires a color monitor. Teacher's guide.

MODELING: BLACK BOX PLUS
IBM-PC/IBM-PCjr
DISKETTE [J]
1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
Much of what scientists believe to be true about the world cannot be seen directly. Therefore, they develop models as useful ways of thinking about these invisible things. This program develops the concept of a model by using the **Black Box 1** and **Black Box II** programs. Students will use the **Sumer** program to develop an understanding of how an exponential model may describe population growth, and they experiment with the trajectory of flying objects using the **Dart Gun** program to calculate the distance that the objects will fly. Requires color/graphics capability and advanced BASIC. Teacher's guide.

MOLECULES AND ATOMS: EXPLORING MATTER
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teacher Series. Includes excellent graphics. Topics covered include: molecules and atoms, the Bohr model, how to draw an atom, ions/ionic bonding. Students will learn: what the nucleus, orbit, proton, neutron, electron, atomic number, and atomic mass are; what the Bohr model is, and how to use it; how to use the periodic table to determine an element's symbol, atomic number, and mass; and which electrons are involved in the formation of chemical compounds. Requires a color monitor. Teacher's guide.

ORGANIZING AND CLASSIFYING INFORMATION
IBM-PC/IBM-PCjr
DISKETTE [J]
1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
Classification is an important process in science because it aids in organizing and making sense out of large bodies of information. Computers can greatly aid our use of such information. This program uses the database inquiry program to enter, search, and sort data and to generate reports. Both the process and results of this activity are closely related to the process of scientific classification. Requires color/graphics capability and advanced BASIC. Teacher's guide.

PHOTOSYNTHESIS: UNLOCKING THE POWER OF THE SUN
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers program. Excellent graphics. Includes: Light as Energy; Characteristics of Light; Wavelength of Light Used by Chloroplasts; and Variables and Controls. Students will learn: what photosynthesis actually is; how different colors of light are either absorbed or reflected; what chloroplasts and chlorophyll are; and how the wavelengths of different colors of light affect cell growth and distribution. Requires color monitor. Teachers' guide.

[S][E][P][I][J][H][C][A] **LEVELS**

S - Special Needs	**J** - Junior High
E - Early Learning	**H** - High School
P - Primary Grades	**C** - College
I - Intermediate Grades	**A** - Adult

SIMULATIONS: CHARLES' LAW AND ODELL LAKE
IBM-PC/IBM-PCjr
DISKETTE [I][J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
Many learning situations are not practical for students to experience directly. Because of cost, safety, time or the abilitity to observe small or distant events, it may be preferable to simulate these situations in some manner. The computer can produce simulations of real-life events so students can experience the events directly. This package introduces the concept of simulations through the use of two programs. **Charles' Law** simulates a laboratory experiement in which the changes in the volume of a gas are observed as it is subjected to temperature change. **Odell Lake** simulates a food chain involving six different fish and several other organisms found in a lake in the Cascade Mountains. Requires color/graphics capability and advanced BASIC. Teacher's guide.

SOLAR SYSTEM ASTRONOMY
IBM-PC DISKETTE [H]
1 IBM-PC Diskette, 64K.....$30.00
Up-to-date information on the planets and their moons including data from NASA fly-bys during the last ten years. Includes: Solar System History; Greenhouse Effect; Life in the Solar System; Comets; Inner Planets; Outer Planets; Paddle Graphics. Color Graphics Board required. Teacher's guide.

STELLAR ASTRONOMY
IBM-PC DISKETTE [H]
1 IBM-PC Diskette, 64K.....$30.00
Explains main sequence stars, novas and super novas, white dwarfs, and red giants. Discusses physical theories for the origin of the universe and explores other philosophical possibilites. Color Graphics Board and double-sided disk drive required. User's guide.

SOCIAL STUDIES

AGENT U.S.A.
IBM-PC DISKETTE [I]
1 IBM-PC Diskette, 128K.....$39.95
Game designed to teach U.S. geography. The FuzzBomb threatens to turn the United States into a nation of helpless fuzzbodies. Agent U.S.A., top investigator for an elite intelligence organization, must crisscross the country by train searching out the dreaded plague spreader. Also teaches practical math skills and problem solving. Color Graphics Board required. Teacher's guide.

COMPUTERS IN GOVERNMENT
IBM-PC/IBM-PCjr
DISKETTE [I][J]
1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00
Introduces students to ways computerized information is collected, stored, and used by the government. Students examine the various kinds of information collected by government agencies and use computer programs to analyze demographic data similar to that used by government agencies. Based on 1980 U.S. census data, the four programs provide simulations which monitor a country's population over time. The population variables used in two of the programs can be altered by the student to determine the variables' impact on future populations. Requires color/graphics capability and advanced BASIC. Teacher's guide.

CONSTITUTIONAL AMENDMENTS
IBM-PC/IBM-PCjr
DISKETTE [J][H]
1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95
Master Teachers Series. Topics covered: Bill of Rights, Amendments 11-18, and Amendments 19-26. Students will learn: how the Constitution is organized; what the Bill of Rights is, why it was added, how it protects individual rights; the purpose of amendments 11-18, when slavery was abolished, when Congress got the right to tax citizens; and why amendments 19-26 were added, how women got the right to vote. Requires color monitor. Teacher's guide.

MILLIONAIRE, THE STOCK MARKET SIMULATION
IBM-PC DISKETTE [J][H]
1 IBM-PC Diskette, 128K.....$59.95
Stock market simulation game based on actual stock market trends - not just random numbers. Players start out with money but only a few hundred shares of stock. They then buy or sell stocks or options, buy on margin or borrow money against their net worth, if necessary. They pay broker's commissions and taxes. They have business information on the different companies; new reports for the week; industry averages; week's high, low, close and change. Very realistic and fun to play. Recommended for junior and senior high math or economic classes, as well as anyone interested in the stock market. One of the best stock market simulation games available.

EUROPEAN NATIONS AND LOCATIONS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 64K.....$44.95

Venture to Europe without leaving your home and discover where European nations, history, cities, current events and geographical landmarks are located. An ideal way for kids to learn European facts and it allows teachers to add their own questions. Includes a complete map of Europe as well as four regional European maps. Students will learn country names, capitals, bordering nations, geographic landmarks, major mountain ranges, rivers and lakes, historical and cultural facts and where they belong on a map in a fun and challenging game. Teachers can vary the difficulty levels of both game play and geography skills independently to provide continued challenge for users of different abilities. User's guide.

HISTORY AND GEOGRAPHY

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$50.00

Revolutionary War Quiz - In this game two players compete in answering questions on the Revolutionary War. It is relatively easy for the user to substitute any questions thus creating a computer quiz on any subject. **Regions of the U.S.** - A drill and practice exercise where the user is asked in what region of the United States randomly selected states are located. **States and Capitals** - This program drills the user on randomly selected states and their capitals. If the user does not know the capital, the computer offers clues to help determine the capital. **Presidents** - A drill and practice session on presidents of the United States. **Country** - Drill and practice on countries and the continent where they are located. Teacher's guide.

POLLS AND POLITICS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00

Introduces the student to political polls, their history, and politics, and the criteria needed to judge them. This unit also shows how computers have become a key component in polling techniques. Not only will students read about computer usage, but they will use the **Define, Enter** and **Count** programs to create and analyze survey date. Requires color/graphics capability and advanced BASIC. Teacher's guide.

STATES AND TRAITS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 48K.....$44.95

This game combines U.S. geography, history and current trivia. Move states to their proper locations on a map of all the states or just a region. Position the states with state boundaries or only mountains and rivers to guide you. Or play the numerous traits games and identify where the information belongs on the map. Traits games include bordering states and rivers, historical facts, current trivia and capitals. "In which state was there a confederate and union capital in the last year of the Civil War?" "Which state is famous for the hogs outnumbering the people 5 to 1?" Design your own games using built-in symbols, such as trees and factories, that you can easily place on the maps, plus add your own questions. An ideal way to teach U.S. geography and social studies. Multiple skill levels. Teacher's guide.

U.S. CONSTITUTION: GUARANTEE OF LIBERTY

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K.....$49.95

Master Teachers Program. Important topics include: Constitution and Preamble, Articles I-VII and The Bill of Rights. Your students will learn: the role of the U.S. Constitution in our government; what the three branches of our Federal government are, and the purpose of each; the importance of the seven articles of the Constitution, the main points of each; and the amendments, how they guarantee our rights to worship or not. Requires color monitor. Teacher's guide.

U.S. CONSTITUTION TUTOR

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 64K.....$35.00

Tutors students on important aspects of the U.S. Constitution for required citizenship or Constitution tests. Features a tutorial mode with extra help screens and practice questions, as well as complete explanations for every answer choice. In the test mode, any missed questions are given again in the tutorial mode when the test is completed. Topics include: legislative, executive, and judicial branches; amendments to the constitution; constitutional rights; elections; federalism; separation of powers; and checks and balances. Questions can be selected by topic or by difficulty level. Teacher's guide.

BUSINESS EDUCATION

BUSINESS AND MANAGEMENT CONCEPTS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$45.00

A collection of practical programs designed to be used in business education settings. The **Savings Interest** program enables students to calculate the amount of interest earned on either a regular savings account or on a certificate of deposit. The **Installment Loans** program enables students to calculate any one of the following -- principal, interest rate, payment amount, or loan period -- by entering the three variables. The **Payroll** program enables students to calculate a small company's payroll information by entering deduction data. Finally, the **Manager** simulation program shows the students how two companies compete in the market place. Requires color/graphics capabilities and advanced BASIC. Teacher's guide.

BUSINESS EDUCATION SERIES

IBM-PC/IBM-PCjr
DISKETTE

BUSINESS EDUCATION 1

IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$45.00

Contains four useful business programs: **Loan Amortization** - A complete loan analysis program that will calculate either payment amounts, number of periods, rate of interest, length of the loan, or interest, and print an amortization schedule. **Bank Reconciliation** - Accepts the beginning bank balance, checkbook balance, checks written, outstanding checks, charges, and reconciles a bank statement. If the reconciliation is off, you may review and modify the outstanding checks, checks written, etc. **Stock Market Simulation** - Simulation where players buy and sell stocks with the objective being to increase their net worth. The simulation allows selection from stocks that fluctuate in price based on market indicators such as prime interest rate, inflation, economic outlook, etc. **Depreciation** - Will calculate depreciation according to the straight line, double declining balance, and sum of the years digit methods and print a depreciation schedule. Teacher's guide. Printer optional.

BUSINESS EDUCATION 3

1 IBM-PC/IBM-PCjr Diskette, 64K; Backup.....$45.00

A very complete and quite sophisticated computerized general ledger accounting system. It requires that your computer be equipped with at least one disk dirve and an 80 column printer. The system comes with an established chart of accounts, change account titles, delete accounts, make journal entries, correct unposted journal entries, print a trial balance, print an income statement, close out the accounting period, and print a balance sheet. The initial chart of accounts and balances may be restored at any time. Also, you may create an empty chart of accounts and create your own accounting system. The program includes two projects with solutions. Backup diskette and teacher's guide included.

ELECTRONIC SPREADSHEET

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup; Student Manual.....$49.00

Help your business education students learn to use the VisiCalc® spreadsheet. Your students will learn how to do anything they would normally do on the traditional accountant's worksheet. A change in any part of the spreadsheet causes the automatic correction of all other cells on the spreadsheet which the change affects. Provides a tutorial which introduces students to the VisiCalc® commands and provides practice exercises. The student manual contains practical problems and are grouped for use in specific business education courses. VisiCalc® must be purchased separately. Required color/graphics capability and advanced BASIC. Teacher's guide and Student manual.

KNOWARE: AN INTRODUCTION TO BUSINESS COMPUTING

IBM-PC DISKETTE

3 IBM-PC/IBM-PCjr Diskettes, 128K.....$95.00

"...one of the most imaginative, motivationally sound introductory tutorials on the market for the IBM...best tool for reducing computerphobia you can buy." **InfoWorld, March 19, 1984.**

TRULY A LEARNING GAME. Fun, easy to understand, yet surprisingly educational. Starts player out as a company mail clerk with the ultimate goal of becoming chairman of the board. Along the way, the program gently introduces six common business applications: simple graphic commands, BASIC programming, data-base management, spreadsheet uses, word-processing/text editing and financial decision making. While simply playing a game, the user familiarizes himself with the applications while advancing in the company. Requires absolutely no prior computer experience. Instructions are all contained in a step-by-step manner on the disk - no complicated manual to struggle through. There is even help from the "experts" when you need it. Easy to use and a lot of fun as the computer helps you every step of the way on the road to becoming a millionaire.

MASTERTYPE IMPROVED

IBM-PC/IBM-PCjr
DISKETTE

2 IBM-PC/IBM-PCjr Diskettes, 128K.....$39.95

Improved educational typing program now has the elements of a traditional touch-typing course in addition to being the most entertaining way ever to learn to type. Includes a second diskette of finger positioning drills and games to increase your typing speed and accuracy. User's guide.

TYPING TUTOR III WITH LETTER INVADERS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 64K.....$49.95

"...ideal coach..." **Personal Software.** *"...most miraculous of programs..."* **Whole Earth Software Catalog.**

Typing Tutor III program is already recognized as a classic. Starting with the "home row" keys – asdfjkl; – the program gives the user the choice of two drills: alphabet keys and number keys. It reports the user's raw speed in words per minute, number of errors, and corrected speed. Then, it automatically adjusts to the user's abilities and progress, creating custom-designed lessons. Through the *Time Response Monitoring®* process, it calculates speed and accuracy on each key. When a threshold level has been reached, the program moves on to other keys. It tests the user on words, numbers, and the full keyboard. Also features *Letter Invaders* an arcade-style game that enables the user to take an entertaining break from the program and sharpen typing skills at the same time. *Letter Invaders* automatically adjusts to the user's skill -- as the player gets better, the game gets faster. User's guide.

WIZARD OF ID'S WIZTYPE

IBM-PC/PCjr DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K.....$34.95

Teaches computer keyboard skills with famous cartoon characters, the Wizard of Id and Spirit. Includes sentence and paragraph typing, adjustable speed and several different types of practice drills. Color Graphics Board required. Notes.

HOME ECONOMICS

HOME ACCOUNTANT PLUS

IBM-PC DISKETTE

2 IBM-PC Diskettes, 128K.....$150.00

"...probably the most flexible and versatile personal financial budgeting and planning package on the market today..." **Book of Apple Software 1983.**

A complete home financial management program. Program includes checkbook balancing, budgeting, printing of checks, a personal general ledger and a net worth statement. Custom retrieval allows you to search out and/or print out just the information that you need (i.e. all transactions that might have a tax consequence). Provides graphics for any category by bar graph, line graph, and/or trend analysis. Allows for approximately 1,000 transactions per disk. A good choice for the non-programming computer owner. Also contains a "Future Forecaster" which helps set future goals. 175-page User's Guide.

MENU PLANNING SYSTEM (Pizza Program)

IBM-PC DISKETTE

1 IBM-PC Diskette, 64K.....$34.50

Computer generated menus with capability of adding or deleting foods, varying the frequency the foods are served (from daily to once every 99 weeks), preparing detailed shopping lists, automatically arranging the list in sequence according to the aisles of your favorite store, generating a per-serving calorie total, and preparing the menus for designated time span (such as every week or every few days). Full documentation included. Requires printer. Runs on single or double density drives.

NUTRITION AND FOOD GROUPS

IBM-PC/IBM-PCjr
DISKETTE

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$36.00

The aim of nutrition education is to establish good habits which will result in wise food selections. The computer has the capability of providing consumer information, analyzing the nutrient content of food, calculating food costs, and aiding the user in grocery shopping and menu and budget planning. Includes a "Lunch in the Computer Cafeteria" food service activity, a "Nutri-Bingo" game, and a homework assignment. All of these activities are designed to teach about the nutrient content of food, to review food groups, and to demonstrate the importance of making good food choices. Requires color/graphics capability and advanced BASIC. Teacher's guide.

CAREER EDUCATION

CAREER SCAN IV PROGRAM
IBM-PC DISKETTE ■■■■■ H C ■

2 IBM-PC/IBM-PC*jr* Diskettes 64K.....$169.00
A comprehensive career search and exploration package accessing over 700 occupational titles. This program is based on the latest and most usable guidance classification system available – the Standard Occupational Classification (SOC). The SOC provides a useful structure to group the 12,000 primary titles in the Dictionary of Occupational titles. Totally self-instructional. Students do not need assitance even if they have never used a computer before. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each occupation which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. For one or two drive systems. Manuals and teacher's guide.

COLLEGE SCAN IV
IBM-PC DISKETTE ■■■■■ H C ■

2 IBM-PC/IBM-PC*jr* Diskettes, 64K.....$195.00
Covers approximately 1100 colleges nationwide and uses 350 attributes to search them. Based upon the latest comprehensive sources of college and university information. Includes 270 majors or pre-professional programs and all major sports for men and women. The search process is fast and easy. Each search takes an average of only 15 minutes. Students simply answer questions asked by the computer. When the search is completed, the computer provides information on each college which matches the student's profile. Once the student has completed a search, he/she may redo the search with the option to change answers. When the student wants to stop and instructs the computer to quit, the computer will provide summary information. Selected information can be sent to a printer if one is available. Displays information on the screen if there is no printer. Designed for one or two drive systems. Student manual; Teacher's guide.

MANAGING FOR SUCCESS
IBM-PC/IBM-PCjr
DISKETTE ■■■■■ H C A

Self-paced and continuously interactive, these programs utilize case studies and simulations of day-to-day situations for users to gain practice and experience in managing. Lively animation and color graphics motivate and hold interest. Skills are practiced until they're mastered. Comprehensive reference materials with each set.

CAREER PLANNING
4 IBM-PC/IBM-PC*jr* Diskettes, 128K.....$79.95
Designed for job holders as well as job hunters, this self-paced instruction begins with an exploration of the user's career experience and a step-by-step skill assessment. Through analysis of the user's current and ideal working environments (responsibilities, co-workers, location, salary) and personal needs, wants and expectations, a plan of action is developed to accomplish career change. Separate skill-development sections discuss writing resumes and cover letters and managing the art of the interview from both sides of the desk.

DELEGATION, TIME AND TASKS
4 IBM-PC/IBM-PC*jr* Diskettes, 128K.....$79.95
Through self-paced exploration and assessment, users become better and more efficient managers of their own lives and careers. The use of time is analyzed and methods for improvement discussed after which users actually develop personal time management plans by setting priorities and developing task lists. The delegation of authority and responsibility is explored through critiques of simulations and case studies after which users design action plans for personal improvement. Added emphasis is placed on understanding the characteristics of successful meetings and how to improve and maintain the effectiveness of meeting dynamics.

PROBLEM SOLVING, STRESS AND CONFLICT
3 IBM-PC/IBM-PC*jr* Diskettes, 128K.....$79.95
Understanding the roots of stress and conflict in career and personal situations provides the basis for the self-paced instruction and assessment offered in this multi-facted program. Users develop their own personal stress profiles and pinpoint stress factors in their lives as they learn to not only cope with stress but initiate steps to reduce it. Keys to identifying and analyzing problems are discussed, as well as preferred methods for dealing with such circumstances and discovering creative solutions. Particular attention is paid to conflict in management situations and developing action plans for conflict resolution.

MUSIC

MUSIC TEACHER: THE NOTABLE PHANTOM
IBM-PC/IBM-PCjr
DISKETTE ■■ P I ■■■■

1 IBM-PC/PC*jr* Diskette, 64K; Keyboard Overlay...$49.95
Students learn to play a keyboard instrument and to read music with the fun of ghosts, spiders and The Notable Phantom. Teaches the note names and positions. Provides ear training. Allows children to learn at their own pace. They can play one of the games, compose, save, play and display their own tunes. Includes a piano keyboard overlay. User's guide.

LOGIC, PROBLEM SOLVING and LEARNING GAMES

EARLY LEARNING
IBM-PC DISKETTE
IBM-PC CARTRIDGE

EARLY GAMES
1 IBM-PC*jr* Cartridge.....$34.95
Learning games for young children or early primary students. Very little adult assistance needed, picture menu, bright colors, large numbers and letters. Nine separate games include: Match Numbers, Match Letters, Count Blocks, Add Stacks of Blocks, Subtract Blocks, Working with Alphabet, Comparing Shapes, Drawing and Saving Colorful Pictures, Practice Spelling Names. Color Graphics Board required. Teacher's guide. Ages 3-7.

KINDER COMP
1 IBM-PC*jr* Cartridge.....$24.95
Three games: **Draw** - lets the child use the joystick to create colorful art on the screen. **Scribble** - sends an enlarged character into motion with sound, all at the touch of a key. **Letters** - helps child match a series of lower and upper case characters to those on screen. Requires color graphics board. Teacher's guide. Ages 3-8.

RHYMES AND RIDDLES
1 IBM-PC Diskette, 64K.....$24.95
Helps children learn reading and spelling by associating specific letters with words they already know. Children also learn the location of letters on the keyboard and the correct lyrics to nursery rhymes and famous sayings. Teacher's guide. Requires color graphic board. Ages 5-9.

SESAME STREET LEARNING GAMES
ERNIE'S MAGIC SHAPES
1 IBM-PC*jr* Diskette, 128K.....$24.95
Provides practice in matching shapes and colors, helping children sort out the things they see in their world. By looking closely at the figures ERNIE uses in his magic act, they can match shapes, identify colors, structure parts into meaningful wholes, recognize figures embedded in other figures and distinguish similarities and difference. Six skill levels. User's guide.

BIG BIRD'S SPECIAL DELIVERY
1 IBM-PC*jr* Diskette, 128K.....$24.95
Provides a playful seting in which children can practice classifying objects. BIG BIRD and LITTLE BIRD have to deliver the right packages to the right places. To help them do this, a child must consider and compare different objects according to their form, class and, on the highest level, function. User's guide.

SHAPE AND COLOR RODEO
1 IBM-PC (256K)/IBM-PC*jr* (128K) Diskette, 64K....$29.95
Six entertaining learning games with a rodeo theme help children recognize and match shapes and colors. Includes: Shape Roundup, Cowhand Brand Color Mix and Match I and II, Rope Trick, and Rodeo Flags. IBM-PC*jr* requires BASIC cartridge. User's guide.

IN SEARCH OF THE MOST AMAZING THING
IBM-PC/IBM-PCjr
DISKETTE ■■■ I J ■■■

1 IBM-PC/IBM-PC*jr* Diskette, 128K.....$32.95
A computer game that is instructive, not destructive. Just as importantly, however, it is fun. Written by Tom Snyder, educator and author of the best-selling Snooper Troops® Detective Series. Designed to let your kids negotiate with aliens instead of destroying them, because, given the opportunity, kids enjoy using their minds. Teacher's guide. Requires Color Graphics Board. BASIC cartridge required for IBM-PC*jr*.

MEMORY CASTLE
IBM-PC/IBM-PCjr
DISKETTE ■■■ I J H ■■

1 IBM-PC/IBM-PC*jr* Diskette, 64K; Backup.....$55.00
Recommended for purchase by **Family Computing** and **Cricket.**
Exciting colorful adventure game that helps your students remember instructions and follow directions. Inside the Memory Castle, students are given a list of instructions. As they move from place to place in the castle, the risks are high. One false move and they are banished. To help them play the game successfully, your students are introduced to a special code designed to improve their memory. Once they have mastered this code, they will be amazed at the power of their minds...and so will you! Requires a color graphics card and color monitor. Backup; teacher's guide.

MOPTOWN PARADE®
IBM-PC/IBM-PCjr
DISKETTE ■■ P I ■■■■

1 IBM-PC/IBM-PC*jr* Diskette, 128K.....$39.95
A progression of seven playful games designed about colorful Moppet characters that teach logic, strategy development and pattern recognition. Requires double sided disk drive and color monitor. BASIC cartridge required for IBM-PC*jr*.
Moptown Parade is a trademark of The Learning Company

MOPTOWN HOTEL®
IBM-PC/IBM-PCjr
DISKETTE ■■ P I ■■■■

1 IBM-PC/IBM-PC*jr* Diskette, 128K.....$39.95
In seven increasingly challenging games children test hypotheses, use analogies and develop strategic thinking skills. A sequel to Moptown Parade. Requires a double sided disk drive and a color monitor. BASIC cartridge required for IBM-PC*jr*.
Moptown Hotel is a trademark of The Learning Company

MYSTERY MASTER: MURDER BY THE DOZEN
IBM-PC/IBM-PCjr
DISKETTE ■■■■ J H ■■

1 IBM-PC/IBM-PC*jr* Diskette, 64K.....$34.95
Sharpen deductive reasoning skills. Twelve crimes can be investigated by up to four players in a race to unmask the perpetrator. Would be detectives are given a map of the city and details of the crime. Then they are given options -- where to go, whom to interview, what areas to search, etc. Cooperatively, competitively, or alone, players have to identify the guilty party and determine the motives. Teacher's guide.

SCIENCE FICTION INTERACTIVE ADVENTURES
IBM-PC/IBM-PCjr
DISKETTE ■■■■■ H ■■

Interactive software based on plots and characters created by great authors. Puts the student right in the center of the adventure story. The story unfolds as the student makes choices and decisions that control the outcome. The settings are based on the science-fiction classics but the action is determined by the student. Every adventure features an advanced text parser system that understands hundreds of words, full color graphics and a beautifully illustrated package that includes background, a word list, and a hint book. Requires color graphics board and color monitor.

AMAZON
DRAGONWORLD
FAHRENHEIT 451 INTERACTIVE ADVENTURE
RENDEZVOUS WITH RAMA
SHADOWKEEP

(Each title, 1 IBM-PC/IBM-PC*jr* **Diskette, 128K; Book**.....$39.95)

SNOOPER TROOPS SERIES
IBM-PC DISKETTE ■■■ I J ■■■

Complete Series (2 Sets; 2 Diskettes).....$65.90
Snooper Troops detective games help children learn to take notes, draw maps, classify and organize information and help develop vocabulary and reasoning skills. Ages 10-adult. Offers the challenge and excitement of solving a mystery and features full color graphics and sound. Teacher's guide. Requires color graphics board.

SNOOPER TROOPS 1
1 IBM-PC Diskette, 128K.....$32.95
The Granite Point Ghost. Someone is trying to scare the Kim family right out of their new home. But who? And why? As a Snooper Trooper, your job is to find out. But it will take some daring detective work. You'll have to question witnesses, uncover background information, and even search dark houses to find the facts.

SNOOPER TROOPS 2
1 IBM-PC Diskette, 128K.....$32.95
Disappearing Dolphin. Someone stole Lily the Dolphin from the Tabasco Aquarium. Your job is to find out who and why. You'll have to question suspects, talk to mysterious agents and even crawl through basements to get the facts.

STRATEGIES IN PROBLEM SOLVING SERIES

IBM-PC/PCjr DISKETTE ■■■[I][J][H]■■

FACTORY: STRATEGIES IN PROBLEM SOLVING
1 IBM-PC (64K)/PC-*jr* (128K) Diskette; Backup.....$55.00
Learning Computer Software Award, Jan 1984. Noted as Exemplary Math/Science Courseware. **Classroom Computer News.**
Color graphics and animation. Challenges students to create geometric "products" on a simulated machine assembly line that they design. Focuses on problem-solving strategies, including working backwards, analyzing a process, determining sequence and applying creativity. Includes: **Test Machine** - Students test the effect of three electronically simulated machines on a raw material. **Build a Factory** - Students set up an assembly line and watch it produce a product. **Make a Product** - Using their knowledge from the first two programs, students now enjoy the challenge of building a factory to duplicate a product shown on the screen. Color Graphics Board required. Backup; teacher's guide.

POND: STRATEGIES IN PROBLEM SOLVING
1 IBM-PC (64K)/PC-*jr* (128K) Diskette; Backup.....$55.00
A small green frog lost in a pond of lily pads, helps students recognize and articulate patterns, generalize from raw data and think logically. The student chooses from six ponds, or levels of difficulty, in which lily pads are displayed in increasingly complex patterns. Student's task is to determine the patterns that will get a frog across the pond. Students collect points by directing their frogs through as many ponds as possible with the fewest number of moves. Emphasis is on efficiency of pattern. Color Graphics Board required. Backup; teacher's guide.

ZORK TRILOGY

IBM-PC/IBM-PCjr
DISKETTE ■■■■[J][H]■■

Complete Series (3 Sets; 3 Diskettes).....$119.85
The classic underground odyssey, takes you into the extraordinary environs of the Great Underground Empire. It's a world so vast and unique, it can offer new discoveres no matter how often you explore it, with challenges that change and revitalize the adventure each time you make your descent. The **New York Times Book Review** sums up the ZORK TRILOGY as "*remarkable adventure fantasies.*" ZORK adventures are among the best-selling computer games in history. ZORK I, II, and III all share a common thread, yet each is a complete and separate story unto itself -- so you can play them in any sequence you choose. Documentation.

ZORK I (The Great Underground Empire)
1 IBM-PC/IBM-PC*jr* Diskette, 64K.....$39.95
ZORK II (The Wizard of Frobozz)
1 IBM-PC/IBM-PC*jr* Diskette, 64K.....$39.95
ZORK III (The Dungeon Master)
1 IBM-PC/IBM-PC*jr* Diskette, 64K.....$39.95

COMPUTER LITERACY

In this section we have omitted most of the grade level designations because the level is largely dependent upon the previous experience of the computer user. Some adults and teachers can be beginnners while some junior high students are quite sophisticated in the use of computer languages and programming (and vice versa). Programs which are designed specifically for younger children are noted in the description. Most programs may be used by junior high level and up. Please read the description carefully to help determine which programs will fit your needs.

BASICS OF BASIC

IBM-PC/IBM-PCjr
DISKETTE
1 IBM-PC/IBM-PC*jr* Diskettes, 64K; Backup.....$79.00
A highly interactive program for teaching BASIC programming. Students are guided through specific examples in a step-by-step manner and materials are presented in small, easy to follow segments. Can be geared for slower to advanced learners by optional reading speed control. These programs are menu-driven and user-friendly and make extensive use of high resolution color graphics and sound. They are accompanied by a well-planned workbook designed to reinforce the concepts by providing examples, exercises and activities so that students actually begin to write programs. Good material for anyone wishing to learn BASIC.

COMPUTER PROGRAMMING GRADES 6-9

IBM-PC/IBM-PCjr
DISKETTE

EXPERIENCING PROCEDURES
1 IBM-PC/IBM-PC*jr* Diskette, 128K; Backup.....$36.00
Designed to be a student's first introduction to computer programming. With **Fly**, a simple graphics-oriented language, students can write procedures to create geometric objects on the screen. This introduction to procedures can then be transferred to the learning of other computer languages. Requires color/graphics capability and advanced BASIC. Teacher's guide.

IFS AND THENS OF PROGRAMMING
1 IBM-PC/IBM-PC*jr* Diskette, 128K; Backup.....$36.00
Branching is an important feature in computer programs as well as an important concept in logic. Introduces the GOTO statement as an unconditional way of branching in a computer program and the IF/THEN statement as a form of conditional branching based on logical discussions. Requires color/graphics capability and advanced BASIC. Teacher's guide.

LOOPS
1 IBM-PC/IBM-PC*jr* Diskette, 128K; Backup.....$36.00
The concept of repeating a process, of "looping" is introduced. Students examine programs using the FOR/NEXT statement and write their own programs. Introduces READ/DATA statement. Requires color/graphics capability and advanced BASIC. Teacher's guide.

THREE R'S OF MICROCOMPUTING
1 IBM-PC/IBM-PC*jr* Diskette, 128K; Backup.....$36.00
The most basic functions of a computer are the input, output, and processing of information. With this package, teachers can begin teaching the BASIC language. The LET, PRINT, INPUT, and END statements are introduced. A special feature of this package is the **Glass Computer** program. This program is designed to demonstrate graphically how computers internally work. The program interprets each BASIC statement one at a time and then simulates what the computer does with each. Gives the students a concrete picture to help them understand the abstract processing of computers. Requires color/graphics capability and advanced BASIC. Teacher's guide.

DELTA DRAWING

IBM-PC DISKETTE
1 IBM-PC Diskette, 128K.....$39.95
Ages 4-12. Children have fun drawing and coloring while learning about computer programming. Student first creates picture using single-key commands. Computer records it as a program and the child can see the program that was written. Then students can write a program in text mode and switch to graphics mode to see their picture. This helps students learn the kind of procedural thinking needed for programming. Easier to use then LOGO turtle graphics. For more advanced users, a complete instructional manual is enclosed. Requires color graphics board.

DISCOVER BASIC
(Problem Solving With the IBM-PC Computer)

IBM-PC/IBM-PCjr DISKETTE
2 IBM-PC/IBM-PC*jr* Diskettes, 64K; Workbook.....$80.90
A comprehensive, hands-on introduction to programming and problem solving using applesoft version of the BASIC computer language. Promotes personal hand-and-mind involvement (the discovery approach). Uses demonstration programs on disk for student experimentation. The demonstration disk, with 34 programs, allows the student to see the program on the screen, list the program, make recommended line changes and rerun the program, thus discovering how the program is modified. A solution disk, with sample solutions to all supplementary programming problems is also included. Stresses top-down stepwise approach to problem solving. The program is an extraordinary mix of traditional expository teaching with interactive computer lab activities, reading assignments, drill and practice, small group activities, heavy emphasis on using the computer to solve a wide range of problems. Teacher's guide contains listing of each demonstration program and the key to the student workbook.

HOW TO PROGRAM IN BASIC

IBM-PC/IBM-PCjr
DISKETTE
1 IBM-PC/IBM-PC*jr* Diskette, 64K.....$29.95
Use your IBM-PC/IBM-PC*jr* computer to learn how to program. This twelve-lesson interactive tutorial will teach you everything from basic programming fundamentals up to advanced high resolution graphics. Move at your own pace -- take two nights or two months. Even if you've never written a program before, you'll be at home in BASIC before you know it. User's guide.

KOALAPAD

IBM-PC DISKETTE
Recommended. **Electronic Learning, Oct 1983.** "*...highly recommended...for sheer fun and the excellent value they offer.*" **InfoWorld, March 19, 1983.** "*...computer popcorn...they're delicious!*" **Compute! Jan 1984.** "*...fun and friendly...*" **Softalk, July 1983.**

KOALAPAD TOUCH TABLET WITH PC DESIGN
1 KoalaPad; 1 IBM-PC Diskette, 64K.....$150.00
A video sketch pad which eliminates the need for a keyboard. Students can control graphics, game commands and other computer functions by merely moving their finger across the special touch-sensitive surface of the KoalaPad. Excellent computer experience for the very young as well as a fascinating tool for any age. Accompanying the KoalaPad is the PC Design, a free-hand drawing and design tool which allows the student to draw, using several different brushes and colors. Students can design geometric shapes of all sizes, magnify their drawing for close-up work and changes, and can store their designs and drawings for later use. The popularity of this set will not be limited to students!

KOALA PROGRAMMER'S GUIDE
1 IBM-PC Diskette, 64K.....$19.95
Helps you take full advantage of all the KoalaPad tablet features. With it, you can develop your own software for the KoalaPad tablet. Includes smoothing algorithms, menu programs and many special hints and tips.

KOALAPAD TOUCH TABLET WITH KOALAPAD PAINTER
1 KoalaPad; 1 IBM-PC*jr* Diskette, 64K.....$125.00
A video sketch pad which eliminates the need for a keyboard. Students can control graphics, game commands and other computer functions by merely moving their finger across the special touch-sensitive surface of the KoalaPad. Excellent computer experience for the very young as well as a fascinating tool for any age. Accompanying the KoalaPad is the KoalaPad Painter, a free-hand drawing and design tool which allows the student to draw, using several different brushes and colors. Students can design geometric shapes of all sizes, magnify their drawing for close-up work and changes, and can store their designs and drawings for later use. The popularity of this set will not be limited to students!

PC LOGO

IBM-PC DISKETTE
2 IBM-PC Diskettes, 128K.....$149.95
A full implementation of Logo, including word and list capability as well as full color turtle graphics. Easy to learn. Faster than other versions. Takes advantage of the extra features of the IBM-PC, including fun action and arrow keys and provides a greatly enhanced editor. Includes complete tutorial for beginning users and a full reference manual. The utility disk provides examples of turtle graphics, word and list manipulation, and business applications of PC Logo. Requires color graphic card for graphics. Tutorial/Reference Manual. Can be used with monochrome or color monitor.

PC PAL

IBM-PC/IBM-PCjr
DISKETTE
1 IBM-PC/IBM-PC*jr* Diskette, 128K.....$39.95
PC PAL introduces the novice to the IBM Personal Computer. It uses games, animation and sound to teach the PC keyboard, the meaning and importance of software, and how the hardware operates.

PC TUTOR

IBM-PC/IBM-PCjr
DISKETTE
1 IBM-PC/IBM-PC*jr* Diskette, 128K.....$59.95
With PC TUTOR you can get rid of all the confusing instruction manuals and learn about MS-DOS easily. Includes an introduction to DOS, all about diskettes, disks, directories and files, DOS commands for directories and files, and DOS commands that control the system.

TURTLE TRACKS

IBM-PC DISKETTE
1 IBM-PC Diskette, 128K.....$39.95
Learning Computer Software Award, Jan 1984.
Designed to teach computer programming to beginners and children. Students learn to move the "turtle" on the screen to produce colorful drawings and designs. Helps youngsters feel comfortable with the computer as they learn programming. Color Graphics Board required.

VISIBLE COMPUTER: 8088

IBM-PC/IBM-PCjr
DISKETTE
1 IBM-PC/IBM-PC*jr* Diskette, 128K; Book.....$69.95
Allows your computer to explain itself visually, taking you on explorations into the deepest recesses of its vast brain; teaching you machine language -- the common bond of all computers! Sit back and watch the steps the microprocessor takes to process an eight bit word into a complex action. See how a computer's brain works. Includes a 160-page manual which is a hard-working tutorial on fundamental concepts of machine language.

APPLE GRADE BOOK

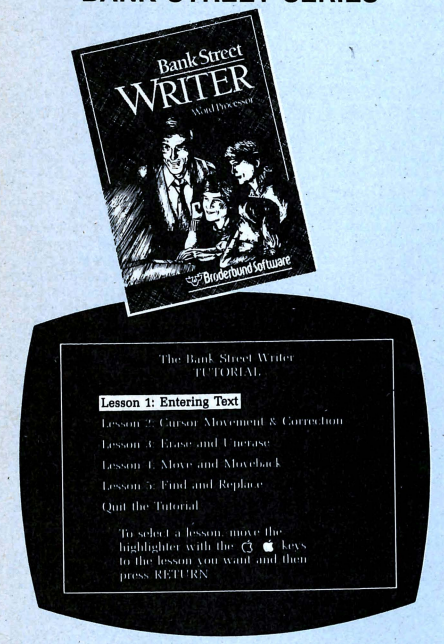
APPLE II DISKETTE

1 Apple II Diskette, 48K.....**$39.50**

"...good value for the price." **School Microwave Review 1982.**

A grade recording system for teachers using the Apple II, II+, and IIe/c. Options: (1) Add grades for any activity -- classify as exam, quiz, report, etc. (2) List student record, activity report, class report -- by name or corded I.D.; get absence reports; up to 80 students per class, 40 grades per student, 250 students per disk, or 50 students with 50 grades; obtain separate test and quiz averages. (3) All data saved on copyable disks -- save each marking period on a separate disk; easy to backup data. (4) Corrections easily made -- grades; make up exams; adding or dropping students; spelling; delete an entire activity; drop the lowest grade. (5) Superior error trapping -- easy to recover from any problem. (6) Grade conversions -- to histogram; to letter grades. (7) Takes advantage of IIe capabilities. Teacher's guide. Revised 1984.

BANK STREET SERIES



BANK STREET WRITER

APPLE II DISKETTE
COMMODORE 64 DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 64K; Backup.....**$69.95**
1 Apple II Diskette, 128K; Backup.....**$69.95**
1 Commodore 64 Diskette, 64K; Backup.....**$49.95**
1 IBM-PC Diskette, 128K; Backup.....**$79.95**

"...introduces word processing to the novice...does have some sophisticated features." **InCider, May 1983.** *Learning Computer Software Award, Jan 1984.*

Turns your computer into a powerful word processor with many advanced features. Has no complex codes to memorize. The screen guides you every step of the way. A few of its many features include: Add, move, insert and erase blocks of text; Universal search and replace; Automatic centering and indent; Automatic word wrap; Disk storage and retrieve with password protection; Document chaining; Page headers and automatic page number - top or bottom; Upper and lower case, and many others. Comes complete with Tutorial and Utility programs. a comprehensive reference manual and a free backup disk. Student approved and extensively tested. The first word processor for all ages.

BANK STREET SPELLER

APPLE II DISKETTE

1 Apple II Diskette, 48K.....**$69.95**

"...recommended highly...its combination of quick, fool-proof operation and solid documentation makes it a pleasure to operate." **InfoWorld, June 4, 1984.**

Helps correct spelling errors and typos in text written with Bank Street Writer. Automatically proofreads writing, searching out and highlighting errors. Automatically inserts correct spelling directly into your Bank Street Writer text files, replacing misspelled words globally, or instance by instance. With two disk drives you can create your own custom dictionary, by adding your own words. User's guide.

BURSAR®

(Student Activity Fund Accounting System)

APPLE II DISKETTE
TRS-80 DISKETTE

2 Apple II Diskettes, 48K; Transaction Slips.....**$195.00**
2 TRS-80 Diskettes, 48K; Transaction Slips.....**$195.00**

Keeps track of funds generated by such extra-curricular activities as athletic teams, marching bands, newspapers, yearbooks, scholarships, and student councils. It is a comprehensive system, providing everything from receipts to printed reports. No accounting background is needed. *Bursar* gives you: reports of each day's transactions; financial statements for each activity; proof of reconciliation of the bank accounts. *Bursar* enables you to: open, close and update accounts; journalize transactions; monitor accounts on video display; print trial balance and monthly statements; accommodate up to 250 fund accounts (each with a maximum of 40 transactions per month) and 99 asset accounts. Free backup with registration. Printer required. Teacher's guide.

CLASS RECORDS MODULE

APPLE II DISKETTE

2 Apple II Diskette, 48K.....**$89.95**

Helps the teacher determine, store, and retrieve grades for each student. Also keeps track of attendance. All facts are under control of the teacher. Teacher names the class, enters the students by name, determines what grading categories to use (eg. Reading, Term Paper, Class Participation, Exams), and how much of the class grade each category is worth. Teacher also decides which exercises to include in each category. Students, Exercises, and Categories may be added, renamed, or deleted at any time. Subjective grades may be entered by the teacher, who has option of "manual entry" or "edit" of grades even when they have been calculated by the Grading Standard or the Class Curve Routine. Student may be excused from any exercise by the teacher's action. Excused exercises will not be considered when grade averaging is done. Reports on the status of students, exams, grades-to-date, and other helpful information may be shown on the screen or printed at any time. Grade summary reports may be printed showing each student's grade for each exercise, category grades, class grade to date, and attendance figures. Documentations.

CLASSMATE

APPLE II DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....**$49.95**
1 IBM-PC Diskette, 64K.....**$49.95**

Takes the drudgery out of class record keeping. Written by teachers for teachers. **Features:** Maintains records of an unlimited number of classes, each with a maximum of 51 students. Records letter or number grades for all assignments, quizzes, tests, etc. Keeps track of excused and unexcused absences. Accepts personal comments about each student. Computes final grades based on weighted averages which you designate. Lists missing work for each student. Gives class rankings and identifies failing students. Analyzes statistics of the classes' performance. Graphs grade distribution curves. Creates printed reports for teachers as well as students and parents. Requires no computer expertise; easy-to-use. Teacher's guide.

CREATIVE WRITER/FILER/CALC

APPLE II DISKETTE
COMMODORE 64 DISKETTE

CREATIVE WRITER

1 Apple II Diskette, 48K.....**$49.95**
1 Commodore 64 Diskette, 64K.....**$49.95**

"...fast, efficient, and economical word-processing 'work horse'." **Family Computing, Oct 1984.**

The word processing program that allows users to concentrate on what they're writing instead of how their words are getting to paper. In 15 minutes users can learn to compose, edit, retrieve and save any kind of document. Use for everything from a school term paper to a club newsletter. Teacher's guide.

CREATIVE FILER

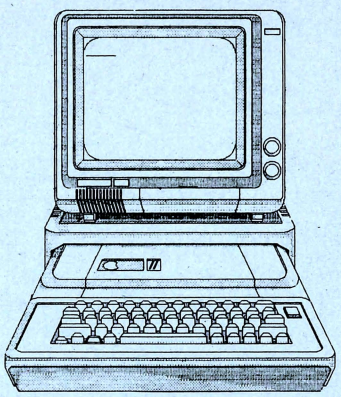
1 Apple II Diskette, 48K.....**$49.95**
1 Commodore 64 Diskette, 64K.....**$49.95**

This program will accurately keep records in any category and in any format. Its categories are created by the user so that filing systems can be made as simple or complex as the user desires. After files have been created, the user can add, modify, delete or just browse through alpha-numerically stored data at the touch of a button. In additon, data can be easily pulled out of files and inserted into a report format designed by the user. Teacher's guide.

CREATIVE CALC

1 Apple II Diskette, 48K.....**$49.95**
1 Commodore 64 Diskette, 48K.....**$49.95**

The spreadsheet program that allows the user to relate figures to each other instantly. Summarize and analyze expenses, play "what if" with various financial options and much more. Makes changing calculations a fast and simple task. Teacher's guide.



EQUIP®

(School Equipment Inventory System)

APPLE II DISKETTE
TRS-80 DISKETTE

2 Apple II Diskettes, 48K.....**$195.00**
2 TRS-80 Diskettes, 48K.....**$195.00**

An equipment inventory program designed specifically for schools. It enables education managers to allocate, locate, and account for all the physical assets of a department, school or school system. *Equip* gives you accurate and up-to-date equipment records, including description, manufacturer, model, serial number, cost and location; immediate reports for government and insurance agencies; professional clear and concise printouts by room location, academic subject, equipment type or manufacturer. *Equip* enables you to: store about 1,200 items per diskette; schedule and monitor the use of equipment; recognize and justify equipment needs; institute borrowing between teachers, departments and schools; verify losses in case of fire, theft or vandalism; develop maintenance programs; update throughout the year, virtually eliminating the need for time-consuming annual inventory; set and implement educational policies. Free backup with registration. Teacher's guide.

FAST LOAD

COMMODORE 64 CARTRIDGE

1 Commodore 64 Cartridge.....**$40.00**

FAST LOAD transforms your Commmodre 64 disk drive from a lumbering hippo into a leaping gazelle. With *Fast Load,* programs that once took minutes to load are booted up in a matter of seconds. Can load, save and copy your disks five times faster than normal. It plugs into the cartridge port of your Commodore 64 and goes to work automatically, loading your disks with ease. And you can copy a single file, copy the whole disk, send disk commands, and even list directories without erasing programs stored in memory. Easy to use, no loading needed! User's guide.

FLEX FILE II

PET DISKETTE
COMMODORE 64 DISKETTE

1 Pet 4040 Diskette, 16K.....**$59.00**
1 Pet 8050 Diskette, 16K.....**$59.00**
1 Commodore 64 Diskette, 64K.....**$59.00**

"...from grades, to names and addresses, to detailed inventories of school equipment and curriculum materials – Flex-File can handle it." **Electronic Learning, Sept 1982.**

A set of flexible, friendly programs to allow you to set up and maintain a data base. Includes versatile Report Writer and Mail label routines, and documentation for programmers to use Data Base routines as part of other programs. **Random Access Data Base** - Lets you step forward or backward through a file, add, delete, or change a record, go to a numbered record, or find a record by specified field (or partial field). Sequential file input and output, as well as the output in WordPro and PaperMate format is supported. Record size, fields per record, and order of fields may be changed easily. **Mailing Labels** - May be printed any number wide, and may begin in any column position. No limit on the number or order of fields on a label, and complete record selection via type code or field condition is supported. **Report Writer** - Flexible printing format, including field placement, decimal justification and rounding. Totals, nested subtotals, and averages supported. Complete record selection, including field within range, pattern match, and logical functions can be specified. Complete documentation.

Teacher/Administrator Programs

GRADEBOOK

APPLE II DISKETTE
TRS-80 DISKETTE

1 Apple II Diskette, 48K; Backup.....$29.95
1 TRS-80 Diskette, 32K; Backup.....$29.95

Provides a complete gradebook printout of your entire class's records or an individual student's. Automatically calculates averages, sorts, handles weighting, incompletes, numerical and letter grades. Teacher's guide. Requires 80 column printer.

GRADECALC

APPLE II DISKETTE
COMMODORE 64 DISKETTE

1 Apple II Diskette, 32K.....$29.95
1 Commodore 64 Diskette, 64K.....$29.95

Easy-to-use grade and attendance management system. You set up your own specific class structure, easily enter and edit data, rapidly average grades, and generate a variety of reports. Clearly written in menu form, can be quickly understood by persons with no programming experience. Prints reports of grade totals, averages, missing assignments, and assignment summaries, attendance and other special notes. Good value for the cost.

GRADEKEEPER

TRS-80 DISKETTE
IBM-PC DISKETTE

1 TRS-80 Diskette, 48K.....$39.95
1 IBM-PC Diskette, 64K.....$49.95

Developed by a teacher to keep his own grades; has easy to use menu operated choices. **Features:** Handles 8 classes with up to 33 students each; 30 sets of test scores on each student. Allows weighing of scores for semester averaging; ranks scores; computes mean, median, mode, standard deviation on any set of scores; scales scores to desired range; graphs distribution of scores on the screen. Has easy to use change options to edit student's names or scores; scores can be stored on tape or disk for permanent record keeping. All scores and other information are typed in from keyboard, by following clear prompts and directions. Teacher's guide. A Micro School Program from Bertamax, Inc.

GRADISK: GRADE MANAGEMENT PROGRAM

APPLE II DISKETTE

1 Apple II Diskette, 48K; Backup.....$75.00

"...a superb piece of software...and because of its menu-driven format – it is extremely easy to use." **Fred Clough, University of Wisconsin-Parkside.**

Gradisk -- grade management software – lets you record, edit, calculate, and plot up to 10 numerical or letter grades for as many as 300 students, annotate individual records, display and print scores, assign weights to individual score categories, calculate class average, and grade distribution -- all with computer speed and accuracy. Documentation included.

GRAPHIC GRADEBOOK

APPLE II DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....$59.95
1 IBM-PC Diskette, 64K.....$59.95

Does some things other gradebook programs have not included. Spread sheet cell format gives an ease of use. The graphical presentations should prove very useful in demonstrating to individual students and to classes as a whole just what is happening with grades. **Features:** Always up to date class and student averages. Bar Graph and pie charts of assignment, category and final grade distributions. Easy to use commands with promptline always available. Handles large and small classes. Grades can be weighted. Number of absences can be kept. Assignments can be based on point values other than 100. IBM-PC requires double sided disk drive.

HOMEWORD

APPLE II DISKETTE
COMMODORE 64 DISKETTE

1 Apple II Diskette, 64K; 1 Audio Cassette.....$69.95
1 Commodore 64 Diskette, 64K; 1 Audio Cassette...$69.95

"...well-designed word-processing program...does a terrific job." **InfoWorld, Vol. 5, No. 49.**

Makes writing easy. Since the commands are illustrated right on the screen, you don't have to memorize any complex codes. Although easier to use it offers you the power of more expensive word processors! Features include: add, move and erase blocks of text; automatic outline indents; underline, boldface, upper and lower case; reliable storage and retrieval of all your files; automatic page numbering; print documents of unlimited length; universal search and replace; easy view of movement through your files. 20-minute tutorial audio cassette included. User's guide.

INSTRUCTOR'S SYSTEM

TRS-80 DISKETTE

Help for the classroom teacher. Save time, reduce paperwork. Versatile system that is easily operated by the computer novice. Available as a complete integrated system or as separate pieces. Maintains class roster, grades; creates and stores exams, administers exams and grades tests.

RECORDS
1 TRS-80 Diskette, 32K.....$69.95

Keeps list of student information and records. Names need to be entered only once. Roster is then alphabetized and stored on diskette. Grades may then be easily entered. Names or grades may be easily corrected. Prints student grade lists, comprehensive student records, and class statistics. When semester is through, it quickly calculates final grades with the formula you specify. Teacher's guide.

EXAMS
1 TRS-80 Diskette, 32K.....$69.95

Creates, modifies, stores and prints multiple choice of true-false exams. Type in questions. Quickly edits. Makes rewriting or reorganizing tests easy. Special **Keyword Search** option speeds reorganization time by searching question files for items containing any word or phrase you specify. Prints exams, an answer sheet and the key. Up to 100 questions/exam. Up to 5 choices/question. Edit, review and select questions. Teacher's guide.

EXAMINER
1 TRS-80 Diskette, 32K.....$69.95

Requires *Exam* program to operate. Administers tests (created with *Exam* program) at the keyboard. Students simply insert their examiner disk. Students may, at instructor's option, receive feedback after each question. Questions are displayed on the screen and students choose answer. Each exam is immediately graded. *Examiner* maintains a record of each student's responses and prints detailed performance profiles -- excellent for review. Teacher's guide.

KALAMAZOO TEACHER'S RECORD BOOK

APPLE II DISKETTE
COMMODORE 64 DISKETTE
IBM-PC DISKETTE

2 Apple II Diskettes, 48K.....$69.95
2 Commodore 64 Diskettes, 64K.....$69.95
2 IBM-PC Diskettes, 128K.....$69.95

An easy-to-use program, with clear documentation and extensive on-screen instructions designed to save hours of work in recording and computing grades. Uses different weighting for every average. Homework can count 15%, tests 25%, or lab work can be twice as much as special projects. Assign a 3.0 or 4.0 on projects and 75%, 80%, 95%, etc. on tests. Change the grading scale and recalculate the grades. Print personalized reports for parents or get total class records. Over 400 customized report formats. Student names can be transferred to another class without retyping. Bar graphs can be printed for any set of grades. Missing data can be ignored or counted as zero. Means and standard deviations are always computed. Student code numbers are computer-generated for posting grades. Extra credit points can be included in grade averages. 150-page indexed reference manual.

KEEP-A-GRADE

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$44.95

Very fast and efficient. Easy to change, add or delete information. Allows data backup. Easy to use. Machine code speed. On-screen instructions. 50 grades each student; 50 students each class; up to 9 classes. 6 or 9 week periods. 5 printed reports. Mid term student entry. Option to drop lowest grade. Weighted test scores. Add, delete, or change any student, test or grade. One display shows all test scores, 6/9 week averages. Alphabetizes roster; class roster duplication. Teacher's guide.

LE SCRIPT

(Word Processing)

TRS-80 DISKETTE

1 TRS-80 Diskette, Model 4, 64K.....$129.95

Powerful word processing program. Features 59 editing features, and 29 printer commands. Built-in Form Letter and Mail Merge capabilities. Contains features comparable to much higher priced word-processing systems. Enhanced version of Zorloff. User's guide.

LIBRARY SOFTWARE

APPLE II DISKETTE
TRS-80 DISKETTE

CATALOG CARD AND LABEL WRITER
1 Apple II Diskette, 32K.....$169.00
1 TRS-80 Diskette, 32K.....$169.00

Recommended. **Booklist.**

Prints cards, spine and pocket labels to your exact specifications, as many copies as you need. Even the most computer-reluctant librarian will find the program a real time saver. In use in many libraries for several years. Style is based on Piercy's *Commonsense Cataloging.* For use on Apple IIe and other Apple machines with lower case adapters. Guide.

LIBRARY CIRCULATION MANAGER
2 Apple II Diskettes, 32K.....$240.00
2 TRS-80 Diskettes, 32K.....$240.00

"...a vast improvement over our old manual operation of writing overdues..." **Leona Lee, Librarian, School Library Journal.**

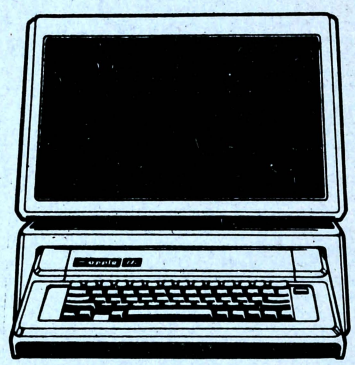
Popular program automatically generates overdue lists and notices, keeps track of outstanding books by student or homeroom number, prints mailing labels and performs title searches. Requires 2 disk drives, 80 column printer. Demo copy available.

LIST HANDLER

APPLE II DISKETTE

2 Apple II Diskettes, 32K; Backup.....$79.95

Eliminates paperwork and introduces accurate record keeping. A simple and versatile filing program, with tremendous speed and large capacity that not only stores and prints lists and labels but letters too. It can hold up to 3000 records on a single diskette so that 24,000 records can be kept on line at the same time with multiple disk drives, giving you a handle on lists, labels and letters that can be stored, retrieved and printed in seconds. Will run on one or two drives, work with a DIF format, and has unlimited sort fields, and the capabiltiy to read and write text files. Use it for common time-saving applications such as address labels, class roles, form letters with address inserts, mailing lists, short newsletters, personnel directories, more. Uses both sides of two diskettes. One diskette contains a "tutorial list" on one side and "tutorial documents" for use in printing records on the other side. The other diskette contains the main program on one side and some utility programs on the reverse. 73-page user's guide included.

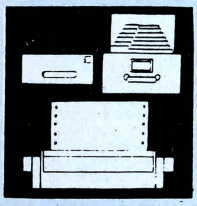


LOGO FOR TEACHERS

APPLE II DISKETTE

INTRODUCTION TO LOGO FOR TEACHERS
1 Apple II Diskette, 64K; Backup.....$49.00
Provides materials for use in training teachers to use Logo in the classroom. While the materials include activities that teach the commands of the language, the emphasis is on involving the participants in using Logo in the problem-solving process. The course materials focus on the turtle graphics capabilities of Logo and provide a brief introduction to Logo's ability to manipulate words and sentences. Topics covered include designing pictures on the screen, creating simple procedures which are used as building blocks for more elaborate ones, editing procedures, creating procedures with inputs, and developing group problem-solving activities. The manual provides the training notes, activity handouts, and transparency masters for a 12-hour training session.

LOGO, WORDS, AND IDEAS
1 Apple II Diskette, 64K; Backup.....$49.00
Logo is great for drawing pictures, but what else can students do with it? This diskette and manual provide materials for use in teacher training to help answer this question. Intended to meet the needs of more experienced teachers. Training notes, transparency masters, and participant handouts for a 10-to 12-hour class are provided. A diskette includes all samples programs necessary to teach the course, as well as possible solutions for the classroom programming activities. Logo programming concepts in this course include recursion, manipulating words and lists of words, and creating interactive procedures. Requires a 64K Apple II system and Apple Logo software.



MECC ADMINISTRATIVE PROGRAMS

APPLE II DISKETTE

STUDENT RECORDS
2 Apple II Diskette, 64K; Backups.....$100.00
This system is the database for a MECC product line of integrated student systems. It maintains all pertinent student information for up to 725 students as well as all necessary school information. It provides flexible, user-specified reporting and allows school administrators to define their own coding structures for data items such as enrollment, codes, residence codes, tuition codes, transportation codes, etc. It will promote students one grade at the end of the school year, deleting withdrawn and graduated students. *Requires an Apple IIe computer with an 80 column card.* Teacher's guide.

STUDENT DAILY ATTENDANCE
2 Apple II Diskettes, 64K; Backups.....$200.00
This system provides for student daily attendance functions for up to 725 students. The school calendar is built one day at a time to accurately track instructional and non-instructional days. Attendance may be taken by day, half-day, or by class periods (up to 12). Attendance information can be entered by keyboard, card reader (HEI or Chatsworth), or scanner (NCS Sentry 3000 or Scan-Tron Model 1200). When using the keyboard, attendance data can be entered in a variety of time-saving methods, such as automated homeroom lists. The system provides for eleven types of daily or periodic reports with several options to meet the specific needs of administrators, and provides for five year-end reports to aid in state reporting. By using this package, MECC *Student Records* information can be updated with marking period absence and tardy figures (up to six marking periods per school year). *Requires MECC Student Records and an Apple IIe computer with an 80 Column Card.* Teacher's guide.

FACILITY AND EQUIPMENT SCHEDULER
2 Apple II Diskettes, 48K; Backups.....$100.00
This flexible, menu-driven system maintains a list of rooms and room usage. Up to 500 rooms with 500 current events and 750 past events may be entered. Seven user-definable characters allow detailed information about each event to be maintained. Information can be sorted on one of nine fields. Reports can be printed, listing events by date, time, buildings, and other variables. The program will inform the user if there is a scheduling conflict between two events in the same room. Teacher's guide.

ENERGY MANAGER
2 Apple II Diskettes, 48K; Backups.....$100.00
This system provides a method of tracking energy use and costs over a period of time. After entering fuel consumption data for your buildings, *Energy Manager* will provide a summary of fuel usage, as well as reports and charts showing totals and percentages of the costs and consumption of the fuels. Unusal fluctuations in fuel costs can be readily spotted and more easily dealt with. Also maintains records of energy conservation methods and resultant savings. Teacher's guide.

MASTERTYPE'S WRITING WIZARD

APPLE II DISKETTE

1 Apple II Diskette, 128K.....$79.95
Easy-to-use, full-function word processor and "writing teaching tool" -- especially designed for kids -- will handle all adult needs as well. Dual windows, a data base and simple correction commands make writing efficiency a breeze. Color highlighting and multiple typefaces challenge kids to write creatively. Even has a complete tutorial and writing exercise. User's guide.

WEEKLY REPORT TO PARENTS
SEPT. 22, 1983

ROSIE BOGO

I AM SO PLEASED TO HAVE ROSIE IN MY CLASS AGAIN THIS YEAR. ROSIE ALWAYS HAS A LOT TO CONTRIBUTE TO THE CLASS DISCUSSIONS.

NEXT WEEK WILL BE 'PET WEEK'. ALL THE CHILDREN WILL HAVE A CHANCE TO TELL ABOUT THEIR PET OR A PET THEY WOULD LIKE TO HAVE.

WORK HABITS S <SATISFACTORY>
ATTITUDE A <EXCELLENT>

PLEASE ASK ROSIE NOT TO BRING HER PET SNAKES THIS YEAR UNLESS THEY ARE IN A CAGE. WE ENJOYED THEM LAST YEAR BUT THERE WERE SOME PROBLEMS WHEN THEY WERE LOST IN THE SUPPLY ROOM.

SINCERELY,

MRS. HARTLEY

PARENT REPORTING

APPLE II DISKETTE

1 Apple II Diskette, 48K.....$39.95
Acts as a "mini-word processor" allowing the teacher to send "personalized" messages home to each student in the class. Messages can be personalized with the student's name. Each message is followed by 8 different teacher-defined categories: English, math, work habits, attitude, etc. Each category may be given one of 15 different "grades". There is also an option for a personal message. A great way to keep your parents informed and involved in what's happening in the classroom! Holds 50 students. Ideal for elementary or special education classrooms. Requires a printer. Teacher's guide.

PFS SERIES

APPLE II/IIE DISKETTE

Included in Software's Greatest Hits - Booklist Jan 1, 1984.
"...encouraging to see a word processor that is inexpensive, simple to use and uncluttered by seldom-used features..." **InfoWorld, Nov 14, 1983.**
Save hours of staff time. Let the computer maintain, sort and file your school record keeping. This program is simple to learn and easy to operate. It eliminates unnecessary paper-handling and time consuming report writing so your staff can quickly process, file and retrieve information. After the information is entered, a few keystrokes will produce lists, budget reports, mailing labels and schedules such as student information, budget and requisition control, room and school event schedules, school calendars, mailing lists for many purposes, busing and vaccination lists, equipment and property management, student emergency information and much more. Futhermore, the great flexibility of the program allows you to create your own reports or to expand ones you're already using. This system will grow with your school's needs. The **PFS: School Record Keeper** must be used in conjunction with **PFS: File** and **PFS: Report** . Requires 2 disk drives. Double density disks are recommended. *You must specify Apple II or Apple IIe when ordering.* User's guide.

PFS: SCHOOL RECORD KEEPER
1 Apple II Diskette, 48K.....$150.00
1 Apple II Diskette, 64K.....$150.00

PFS: FILE
1 Apple II Diskette, 48K.....$125.00
1 Apple II Diskette, 64K.....$125.00
"...especially like the form's flexible format...generally very easy and enjoyable to use." **Software Supermarket, Feb 84.**

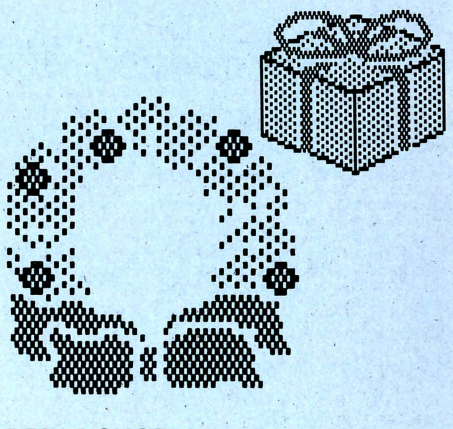
PFS: REPORT
1 Apple II Diskette, 48K.....$125.00
1 Apple II Diskette, 64K.....$125.00

PFS: WRITE
1 Apple II Diskette, 64K.....$125.00

PHI BETA FILER

APPLE II DISKETTE

2 Apple II Diskettes, 48K.....$39.95
"...a clearly outstanding filing program for new and experienced computer users ages 8 to adult." **InfoWorld, June 4, 1984.**
A file and list management program which sorts and prints and delivers records alphabetically or numerically. Also has a unique Quiz-Master function that develops games and quizzes. Easy to use. Helpful on-screen commands. Color and sound. Edits and expands files easily. Prints labels, tables, charts and tallies, too.



PRINT SHOP

APPLE II DISKETTE
COMMODORE 64 DISKETTE

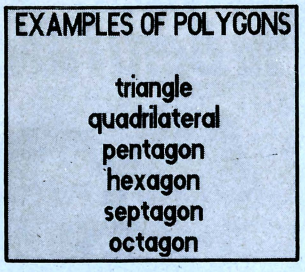
1 Apple II Diskette, 48K; Paper; Envelopes.....$49.95
1 Commodore 64 Diskette; Paper; Envelopes.....$44.95
"...easy and fun to use, apparently bug-free, practical, and novel...combines ease of use, practicality, and room for creativity." **A+, Dec 1984.** *"...integrates fun with functionality...for anyone who likes to add a personal touch."* **Personal Computing, Jan 85.**
TEACHERS! ANYONE! If you can turn on a computer, you can produce **PROFESSIONAL-LOOKING POSTERS, SIGNS, BANNERS, CARDS, or ANNOUNCEMENTS.** Endless uses for schools. Simply select from numerous already available border designs, patterns, pictures and symbols (such as a heart, a computer, a train, a disk, etc., etc.). All are available in various sizes. Create innummerable variations. Save hours of time. Type your verbal message selecting from one of eight different typestyles in three sizes and in solid, outline or 3-dimensional format. The program will even center or right or left justify. All typing errors can be easily corrected. A graphics editor is available for those who want to create original designs or modify those already available in the program. Requires printer. *NOTE: Commodore 64 version not yet compatible with the new Commodore Printer, Model MPS-802. EASY TO USE. PRODUCES PROFESSIONAL-LOOKING RESULTS. DON'T MISS THIS ONE.*

PRINT SHOP GRAPHICS LIBRARY 1

APPLE II DISKETTE
COMMODORE 64 DISKETTE

1 Apple II Diskette, 48K.....$24.95
1 Commodore 64 Diskette, 64K.....$24.95
120 new graphics for the *Print Shop*. Includes holidays, education, sports, special occasions, animals and creative patterns.

Teacher/Administrator Programs



PROFESSIONAL SIGN MAKER

APPLE II DISKETTE

1 Apple II Diskette, 64K; Backup.....$59.00

Here's the program you've been waiting for. Produces high quality professional graphic letters for signs. Wide variety of print sizes. Signs may contain up to eight lines of text, each up to eighty characters long. Letters can be 1, 2, 4, and 8 inches high, allowing space for decenders. Various levels of shading are possible. Special characters allow a large variety of borders such as hearts, circles, stars, checkerboards, etc. Ideal for classroom signs, overhead transparencies, report covers/title pages, advertisements, homecoming/sports banners. Signs may be saved on a diskette and retrieved for later creation. For 64K connected to the Epson MX-80, -100, or FX-80 with Graftrax PLUS or the Prowriter. Teacher's guide.

PURCHASE®

(Annual School Purchasing System)

APPLE II DISKETTE

TRS-80 DISKETTE

1 Apple II Diskette, 48K.....$195.00

1 TRS-80 Diskette, 48K.....$195.00

Makes a school's annual ordering process a cost-effective system. It simplifies the bulk purchase of items as varied as instructional and art supplies, science apparatus, paper goods, custodial products, and health and training room supplies. *Purchase* compiles specifications, computes quantities and prices and prints up all necessary forms. Use Purchase to order for a single department, or school, or an entire school system. *Purchase* gives you: a file of your own bid specifications; purchase requisitons for the staff; formal invitations to bid for the vendors; purchase orders and delivery schedules. *Purchase* enables you to: prevent costly calculation errors; avoid missed deadlines to guarantee prices; eliminate time-consuming typing chores; guarantee better service and faster response from vendors; promote a clearer understanding and appreciation of annual purchasing process on the part of the staff. Teacher's guide. Free backup with registration.

PUZZLES/POSTERS

APPLE II DISKETTE

TRS-80 DISKETTE

COMMODORE 64 DISKETTE

IBM-PC/IBM-PCjr DISKETTE

1 Apple II Diskette, 64K; Backup.....$44.00

1 TRS-80 Diskette, 48K; Backup.....$43.00

1 Commodore 64 Diskette, 64K; Backup.....$44.00

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$44.00

Word search puzzles, crossword puzzles, mazes, posters, and banners -- you can create, design, and print all of them with the programs on this diskette. The **Word Search** program lets you create and edit word lists that are then used to print word search puzzles. The **Crossword Puzzle** program lets you create and edit word lists which are used to print crossword puzzles. The word lists that you create for the **Word Search** and **Crossword Puzzle** programs can be used interchangeabley. If you want to make the lists permanent, you may store them on a data diskette. The **A-Maze-Ment** program generates unique mazes and the **Posters and Banners** program enables you to design and print posters and banners in a variety of letter styles. Note: These programs are based in part on those formerly included in MECC's Elementary Volume 2 and Teacher Utilities Volume 1. IBM-PC/IBM-PC*jr* version requires color/graphics capability and advanced BASIC.

READABILITY

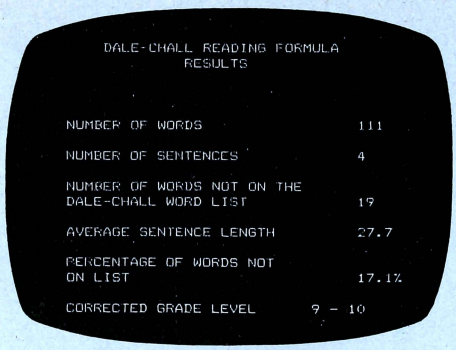
APPLE II DISKETTE

IBM-PC/IBM-PCjr DISKETTE

1 Apple II Diskette, 48K; Backup.....$45.00

1 IBM-PC/IBM-PCjr Diskette, 128K; Backup.....$44.00

Now you can use the computer to analyze a text sample quickly to determine the readability level. **Text Editor** enables you to enter, edit, and store on a separate data diskette text passages of approximately 100 words. **Readability Analysis** enables you to determine the readability level of a passage using one or more of a variety of analysis methods. Use of a printer is optional, but having a printout of the sample material and readability analysis provides a convenient reference tool. IBM-PC/IBM-PC*jr* version requires color/graphics capability and advanced BASIC. Teacher's guide.



READABILITY ANALYSIS

APPLE II DISKETTE

TRS-80 DISKETTE

COMMODORE 64 DISKETTE

1 Apple II Diskette, 48K.....$29.95

1 TRS-80 Diskette, 48K.....$29.95

1 Commodore 64 Diskette, 64K.....$29.95

The teacher types in an appropriate passage and the computer counts syllables, words, and sentences and calculates average word and sentence length and word difficulty. Teacher may choose from the Spache Primary Reading Formula, the Dale-Chall Readability Formula, and the Fry Readability Scale. Allows for familiar proper nouns and technical terms which students may know through class study. Displays or prints the passage, detailed analysis, and reading level.

READING LEVEL ANALYSIS

APPLE II DISKETTE

TRS-80 DISKETTE

IBM-PC DISKETTE

1 Apple II Diskette, 48K, Print/Non-print.....$39.95

1 TRS-80 Diskette, 48K, Model III, Print/Non-print$49.95

1 IBM-PC Diskette, 64K, Print/Non-print.....$39.95

Don't spend hours calculating reading level scales by hand. Simply type in about 100 words from the book or paper to be evaluated. Then press a key and the computer will compute the following scales: Dale-Chall Index, Flesch Index, Fog Index, Smog Index, Fry coordinates. Includes two other scales: Spache and Wheeler Wilson. Used for material from grade 1 and up. Specify either printing or non-printing version. Teacher's guide. A Micro School Program from Bertamax, Inc.

TRS COLOR ADMINISTRATIVE SYSTEM

TRS-80 COLOR COMPUTER DISKETTE

TC – ADMINISTRATIVE PACK

Complete Series (3 Sets, 3 Diskettes).....$129.95

TC – Attendance

1 TRS-80 Color Computer Diskette, 32K.....$44.95

Can be interfaced with TC-Record Keeper at the end of each quarter. Menu driven. **Features:** Handles 400 students with 185 days attendance. Records can be displayed on screen or printer. Automatically saves data to disk. Alphabetizes students by class or entire school Update absentees.

TC – Grade Aid

1 TRS-80 Color Computer Diskette, 32K.....$34.95

Calculates and records grades. Can be interfaced directly with TC-Record Keeper at the end of each quarter. Menu driven. **Features:** Grades can be converted to letter grade. 40 students with 200 grades per student. Records can be displayed on screen or printer. Weighted assignment categories. Automatically saves data to disk. Alphabetizes class rosters. Allows you to change any grade.

TC – Record Keeper

1 TRS-80 Color Computer Diskette, 32K.....$69.95

Requires two disk drives to interface with TC-Grade Aid or TC-Attendance.

Designed to interface with TC-Grade Aid or TC-Attendance at the end of each quarter. Also allows you to manually enter students final quarter grades from the keyboard. Menu driven. **Features:** Handles 400 students. Up to eight final subject grades per quarter. Import grades and attendance from TC-Grade Aid. Records can be displayed on screen or printer. Detailed printed report by student, class, or entire school. Automatically saves data to disk. Sort allows you to alphabetize students by class or entire school. Allows you to update any student's record.

TC – FILE

1 TRS-80 Color Computer Diskette, 32K.....$29.95

The answer to organizing your important information. Student files, school inventory, mailing list, and personnel records are just a few of the possible uses of this program. Menu driven. Supports labels and reports. Includes Sort, Find and Change Routines.

SCHOOL LEDGER-REPORT SYSTEM

TRS-80 DISKETTE

2 TRS-80 Diskette, 48K.....$179.00

Minimizes the time required to maintain school activity fund records and produce detailed accounting reports. Account names and balances are stored on diskette. Receipts and disbursements at the computer keyboard, and these are stored on diskette. Four monthly reports and a year-to-date account report can be easily lineprinted. The current balance for any account may be displayed on the screen. More complete information available upon request. Teacher's guide.

TEACHING ASSISTANT

IBM-PC/IBM-PCjr

1 IBM-PC/IBM-PC*jr* Diskette, 128K; Backup.....$44.00

Create, edit, and store sets of question and answer exercises in any subject area and at any grade level with the **Review Load** program. Exercises can be written in a variety of formats: multiple choice, short answer, or true-false questions. You can then print these exercises as tests of worksheets with the **Test Generator** program. You can also provide students with interactive drill on the exercises with the **Review** program. With the **Review Report** program, you can record students' scores from the **Review** program. Teacher's guide contains a sample set of questions and answers to show the variety and type of quesion formats you can use. All of the programs require a data diskette. **Test Generator** program requires a printer. Requires color/graphics capability and advanced BASIC. Teacher's guide.

WRITE CHOICE

APPLE II DISKETTE

1 Apple II Diskette, 48K; Manuals.....$44.95

"...excellent set of simple, sturdy writing tools for students, beginning authors, and low-volume writers." **Popular Computing, Jan 1985.**

Ideal way to get started in word processing. Makes it easy to prepare letters, forms, term papers, tests, resumes, etc. because what you see is exactly what will be printed. **Features:** Add or remove letters, words, or lines; Copy or move blocks of text; On screen help commands; Global search and replace; Underlining; Automatic centering or justification; Set or clear windows; and many others. Also includes: **Tut's Typer** - a fun hi-res graphics game to help you learn how to type. Includes a hi-res keyboard learning mode with lessons to teach proper typing. **The Analyst** - a special word processing utility to determine the readability values of documents you have written. **Word Processing Style Manual** - excellent reference book with tips on style and format. **Elements of Style** - the classic writing style manual.

ZORLOFF WORD PROCESSING SYSTEM

TRS-80 DISKETTE

1 TRS-80 Diskette, 32K.....$69.95

"All the things we've come to expect from word processors...Zorloff does those things better and adds features." **80Micro, March 1983.**

A truly outstanding word processor. Fast, easy to learn and use, yet one of the most powerful in its class. Contains 58 editing commands, including Zap Processing. Every function executed with a single key stroke to speed the editing process. No time wasted going in and out of different modes or referring to menus. Performs same functions in half the time of most other word processing systems. Supports mailing lists, form letter, mail-merge capabilities. Written in fast Z80 machine language with type-ahead key-stroke bufferng for speed. User definable spacing, sheet size and margins. Built-in screen dump function. Continuous on-screen display of word count, line count, and free memory count. Superscripts, subscripts, underlined, bolded, expanded and condensed type styles - combine and intermix within a line. Automatically justifies and word-wraps as you type. Search and Replace, Global Search and Replace. Preview option allows viewing text in near-final form before printing. Moves and copies blocks of text. Odd and even page user-definable headers, footers, and page number lines and much more. Excellent manual fully documents each feature and capability. *Note: Will not work on Model 4; see LeScript for Model 4 Word Processor.*

LEARNING ARTS

P.O. Box 179
Wichita, KS 67201
Phone: 316/682-6594 **Fed. I.D. #48-0761076**

MICROCOMPUTER PROGRAMS ORDER FORM Y

Date _____ Purchase Order No. _____

BILL TO:

School _____
Street _____
City _____ State__ ZIP _____

SHIP TO:

School _____
Street _____
City _____ State__ ZIP _____

Qty. of Title	Catalog Page No.	TITLE	COMPUTER (specify brand and model)	FORMAT (specify diskette cassette, cartridge)	PRICE	

SHIPPING CHARGES:
Shipping charges prepaid and added to invoice.

On orders of:		Shipping Charges:
0 -	$14.99	Below minimum/will not ship
$15.00 -	$49.99	$2.50
$50.00 -	$199.99	5% of order amount
$200.00 -	$499.99	4% of order amount
$500.00 -	$999.99	3% of order amount
$1,000.00 -	$1,499.99	2% of order amount
$1,500.00 -	$1,999.99	1% of order amount
$2,000.00 or more		no charge

TOTAL FROM OTHER SIDE
SHIPPING CHARGES
TOTAL

SCHOOLS: Signature of superintendent, principal, or business manager is required.

Signature _____ Title _____

Individuals and Businesses must prepay - CHECK or MONEY ORDER.
Please allow 4-6 weeks delivery for items paid for by personal check.

MINIMUM ORDER $15.00
Plus Shipping Charges
(All orders under $15.00 will be returned)

All prices are subject to change without notice.

Y

LEARNING ARTS

P.O. Box 179
Wichita, KS 67201
Phone: 316/682-6594 **Fed. I.D. #48-0761076**

MICROCOMPUTER PROGRAMS ORDER FORM Y

Date _____ Purchase Order No. _____

BILL TO:

School _____
Street _____
City _____ State__ ZIP _____

SHIP TO:

School _____
Street _____
City _____ State__ ZIP _____

Qty. of Title	Catalog Page No.	TITLE	COMPUTER (specify brand and model)	FORMAT (specify diskette cassette, cartridge)	PRICE	

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$50.00 -	$199.99	5% of order amount
$200.00 -	$499.99	4% of order amount
$500.00 -	$999.99	3% of order amount
$1,000.00 -	$1,499.99	2% of order amount
$1,500.00 -	$1,999.99	1% of order amount
$2,000.00 or more		no charge

TOTAL FROM OTHER SIDE
SHIPPING CHARGES
TOTAL

SCHOOLS: Signature of superintendent, principal, or business manager is required.

Signature _____ Title _____

Individuals and Businesses must prepay - CHECK or MONEY ORDER.
Please allow 4-6 weeks delivery for items paid for by personal check.

MINIMUM ORDER $15.00
Plus Shipping Charges
(All orders under $15.00 will be returned)

All prices are subject to change without notice.

Y

MICROCOMPUTER PROGRAMS Order Form (for additional titles)

Qty. of Title	Catalog Page No.	TITLE	COMPUTER (specify brand and model)	FORMAT (specify diskette cassette, cartridge)	PRICE	
				TOTAL PAGE 2		

Transfer to other side

Available Upon Request:
☐ **LEARNING ARTS SOUND FILMSTRIP CATALOG**
☐ **LEARNING ARTS EDUCATIONAL COMPUTER SOFTWARE CATALOG** (additional copies)

MICROCOMPUTER PROGRAMS Order Form (for additional titles)

Qty. of Title	Catalog Page No.	TITLE	COMPUTER (specify brand and model)	FORMAT (specify diskette cassette, cartridge)	PRICE	
				TOTAL PAGE 2		

Transfer to other side

Available Upon Request:
☐ **LEARNING ARTS SOUND FILMSTRIP CATALOG**
☐ **LEARNING ARTS EDUCATIONAL COMPUTER SOFTWARE CATALOG** (additional copies)

Teacher/Administrator Programs

BASKETBALL STATISTICS PROGRAM
TRS-80 DISKETTE
1 TRS-80 Diskette, 48K; Backup.....$50.00
Designed to compile statistics which are commonly prepared for basketball teams. Enables the individual to maintain team and individual player records with relative ease. Offers the option to record and store game and season statisitcs by player, team and opponent. Data may be printed to screen or to printer.

BASKETBALL STATS
APPLE II DISKETTE
PET DISKETTE
COMMODORE 64 DISKETTE
1 Apple II Diskette, 48K.....$39.50
1 Pet Diskette, 32K.....$39.50
1 Commodore 64 Diskette, 64K.....$39.50
Menu driven program written for the computer novice. Allows you to enter a roster of up to 18 players, enter statistics for these players for up to 30 games per season, and effortlessly print out summaries for each game, season totals following each game, and the team's season record. Supports up to 16 statistics -- 4 are user-defined. Full corrections routine for all entries and abilitity to add players at any time. Easy to use. Excellent documentation.

FOOTBALL SCOUT
APPLE II DISKETTE
PET DISKETTE
COMMODORE 64 DISKETTE
1 Apple II Diskette, 48K.....$79.50
1 Pet Diskette, 32K.....$79.50
1 Commodore 64 Diskette, 64K.....$79.50
Allows a coach to enter scouting information on a rival team's offense play by play, in most cases directly from game charts. Up to 50 offensive plays per game may be stored in each game file and if a team is scouted several times, up to 6 game files may be linked to produce a composite report of up to 300 plays! Generates: Individual Play Report - summary of every play run by your opponent sorted in order by down and distance. Tendancy Report - number of plays run and percentage of plays run at each hole for formation, down and distance, zone on field, and hash mark. Zone-Hash-Down-Distance Reports - prints one massive chart analyzing plays run at each hash depending upon zone of the field, down, and distance. Easy to use by coach or student assistant.

COACH'S MICRO-SECRETARY

BASEBALL-EASY STATS MASTER
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$55.00
1 Apple II Diskette, 48K; Backup.....$70.00
Create individual player and team files of all offensive and pitching stats. The file building system contains all of the necessary categories; all you do is type the player's name and corresponding stats in these categories as each game is played. The file automatically updates. The computer tabulates and records season totals in each category. It also calculates and records batting averages and ERA's. Outputs to a monitor or a printer to produce permanent copies of your records. Teacher's guide.

BASKETBALL STATISTICS PROGRAM
APPLE II DISKETTE
1 Apple II Diskette, 48K; Backup.....$44.00
Maintains a file of records for each game your team plays. At any time records may be entered, edited, or printed for a single game or group of games. Creates printed graphics to compare individual or team performance. Initializes diskettes to store information and allows you to protect your records. Teacher's Guide.

TOURNAMENT MASTER
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$39.95
A program for setting up single elimination (and in some cases, double elimination) tournaments in a completely random fashion. Optionally, four seeded players can be placed into the bracket system. Each seed is put in a different quarter of the structure. Contestants are allowed one teammate or no teammate. Teammates are automatically put in opposite halves. All byes occur in the first round. Up to 64 contestants can be randomly placed in the same bracket structure. The program supports a general roster of 300 contestants who can be put in their various appropriate bracket structures according to their weight class, age, or any other criteria that is desired. A printer is recommended for hardcopy printouts. Copy masters of common bracket structure are included for final construction of the tournament pairings. Very sophisticated, easy-to-use program. Will save you hours every time you use it. Documentation.

MICRO GRIDDER
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$99.00
Designed for use at the football game by the statistician to record the details of each play. At any time, the accumulated stats for individuals or both teams may be instantly recalled and optionally printed out in seconds. At halftime and at the end of the game, a complete printout of comprehensive individual and team statistics can be produced in minutes. In addition, the statistics may be saved onto a diskette so that multiple printouts can be produced at any time in the future. Valuable asset to your football program. Documentation.

TRACKSTAT
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$49.95
For keeping accurate, up-to-date records of the times and marks of your track team members. Provides: (1) Ranked list of the best marks for an event ...who made them, when they made them and the most recent mark of those same team members. (2) An entire summary of any meet for your team members...the most recent or back to the first meet of the season. (3) Individual marks by a member of the team for any or all events and for any or all meets during the season. (4) An entire profile of each individual's best mark for every event that they have competed in. (5) A complete printout of all the activity that has taken place in an event...all of your team's marks and at what meets they made them. Easy to use and designed for fast input of data from each new meet. Accommodates up to 15 meets per season with 75 events for each meet so that multiple divisions can be kept on one disk. A printer is needed for hardcopy printouts. Documentation.

WRESTLING STATISTICS
APPLE II DISKETTE
1 Apple II Diskette, 48K; Backup.....$43.00
Maintains a file of records for each of your team's meets. At any time statistics may be entered, edited, or printed for single meet or group of meets. A highlight of the package is the easy entry of move points (by letter) directly from the scorebook. Program calculates move points and returns a numerical score. Initializes diskettes to store information. Teacher's guide.

CREATE LESSONS
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$29.95
Allows a teacher to easily write lessons, drill sequences, tests or tutorials. Each lesson starts with an instruction frame which may be accessed by the student at any time during the lesson. The lesson itself may include either questions (6 lines) or additional information. Questions may be either completion items or multiple choice. They may be presented randomly or sequentially. A hint frame may be embedded in the lesson or an explanation frame may be used after an incorrect response. Teacher can set parameters. Keeps records on the lessons that are created. User's guide.

CROSSWORD MAGIC: *See APPLE II ENGLISH Section.*

LEARNING SYSTEM
APPLE II DISKETTE
2 Apple II Diskettes, 48K.....$75.00
This program allows you to create and print multiple choice, fill-in and column-match tests. These tests can then be administered to students, and the performance monitored. The system provides an original master diskette as well as one player disk. Questions, answers and student records are stored on the master diskette. The master menu presents the following options: testing, creating tests, creating compositions, reviewing of students scores, status of tests, deleting tests, and initializing user diskettes. Excellent user's guide provides a variety of examples that guide the user through all phases of test construction and administration. Printer enhances capabilities. Teacher's guide.

INDIVIDUALIZED STUDY MASTER
APPLE II DISKETTE
2 Apple II Diskettes, 48K.....$59.95
Generates study guide sheets and worksheets based on information the teacher enters. It guides the teacher in entering any terms or concepts and specific information about them by overall category. Each set of terms and information is titled and saved as a study master. Using the menus in the program, the teacher can then select a study master and the type of study guide or worksheet that he/she wants the program to generate. These are printed out and used with students for individualized instruction. The program can generate four levels of study guides: Teacher Master List; Terms, Definitions, and Sources; Terms and Sources; Terms -- and seven different kinds of worksheets: Terms; Multiple-Choice; Matching Items; True/False; Fill-in-the-Blanks; Questions; and Spelling Scramble. Teacher's guide.

CREATE YOUR OWN TESTS AND LESSONS

TUTORIAL QUIZ MASTER
APPLE II DISKETTE
TRS-80 DISKETTE
3 Apple II Diskettes, 48K.....$79.95
3 TRS-80 Diskettes, 48K.....$79.95
Enables teachers without programming experience to create and customize computerized lessons and tests from their own instructional content. Preestablished lesson and test formats. The instruction content is supplied by the teacher. As easy to use as typing in the answers to questions on the computer screen. The teacher can include "tutorial hints" to help students answer correctly. Record-keeping information is automatically recorded and stored on disk. Comprehensive teacher's guide.

WORD GAMES
TRS-80 DISKETTE
2 TRS-80 Diskettes, 48K.....$89.00
Create thousands of cross-word, word-find, anagram and word-guess games using word lists and clues stored on diskette. All games may be played at the computer keyboard or lineprinted for duplication and distribution to students. Teachers may create games using purchased word-list diskettes, edit purchased word-list diskettes or use their own word lists and clues. Once created, games are stored on diskette and may easily be reused. Requires 2 disk drives and an 80 column lineprinter. Teacher's guide.

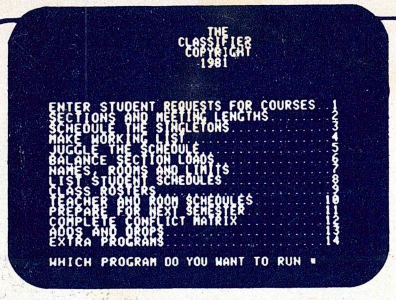
SUPER QUIZ II
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$59.95
A multiple-choice testing system. Enables the teacher to: Create a multiple choice test bank of up to 10,000 questions; Add/edit/replace questions at will; Select questions randomly; Prepare quizzes of few or many questions on one or numerous chapters/topics; Print multiple copies of the same exam; Compose questions in upper and lower case without additional hardware; Allows for superscripts and subscripts; Have at least ten other useful options in selecting, arranging and printing multiple-choice tests - up to 500 characters per question, 100 questions per exam, up to 100 printed copies per test.

TESTMASTER
PET DISKETTE
COMMODORE 64 DISKETTE
1 Pet Diskette, 32K.....$35.00
1 Commodore 64 Diskette, 64K.....$35.00
Complete test and quiz development system. Disk files may include true-false, multiple choice, completion or short answer questions. Tests of up to 100 questions using up to 10 different data files. Questions may be selected by visually scanning a file or allowing computer to randomly select. Developed tests may be viewed on the screen or printed on paper. Also prints answer keys and student response sheets. Computer will mix questions and responses to produce alternate test forms. Easy to erase, add or correct any data file. Designed for non-professional computer users. Includes manual.

TEST COMPOSER
TRS-80 DISKETTE
IBM-PC DISKETTE
1 TRS-80 Diskette, 48K.....$59.95
1 IBM-PC Diskette, 128K.....$59.95
Menu driven and easy to use. Will be valuable to anyone who must regularly prepare alternate forms of a test or a test to measure mastery of a specific set of objectives. **Features:** Test items may be stored for future use; Items may be coded for type, class, difficulty level, and objective; Item types: true/false, multiple-choice, matching, short answer, essay; Answer key prepared for each test; Editing utility for item updating and revision; User may select test items by number for inclusion on a test or user may enter parameters for type, level, class, objective, and difficulty level and have computer compose a test. Alternate forms are easy to prepare. Item banks may be updated as needed to keep items current and relevant. A printer is required. The test masters produced may be used as masters for reproduction or direct use in individual cases. This program will not score tests. IBM-PC requires 128K and an 80 column card.

TEST MAKER
APPLE II DISKETTE
1 Apple II Diskette, 48K.....$39.95
Prints out tests that may be used by individual students as printed or that may be used as masters for reproduction. **Features:** Randomization of items to create different forms of the test; Test can be stored on disk for later use; Answer key generated for each form of the test generated; Choice of printing formats; Five question formats: matching, short answer, true-false, multiple choice, fill in; Up to 125 questions per test; Up to 6 lines per question or answer; Tests stored by name; Duplicate tests may be printed in exact or random order; Printer control and paging options; Tests can be saved on initialized diskettes for future use; Routines for editing or updating test items or title information. Easy to use -- field tested. Flexible enough to be usable in the majority of testing situations commonly found in schools. Requires lower-case adapter. A Micro School Program from Bertamax, Inc.

STUDY GUIDE
APPLE II DISKETTE
1 Apple II Diskette, 48K; Backup.....$41.00
Create and edit sets of questions and answers in an extremely convenient way. Use the **Designer** program to write multiple choice, true-false, matching, and completion questions using preset formats. You may also provide remedial feedback as well as assign objective numbers and statements to each question. The **Reviewer** program then provides students with interactive drill and practice on the questions and answers that you created. Students may review the questions by objective category within any set of questions. The sets of questions that you create with the **Designer** program can also be used to print worksheets and tests using the **Examiner** program. You may specify the number of questions from each objective category to be printed on each test or worksheet. Note: These programs are based in part on those formerly included in MECC's *Teacher Utilities Vol. 1.*



TEACHER ADMINISTRATOR SYSTEMS

ADMINISTRATIVE PROGRAMS THAT WORK TOGETHER TO SAVE YOU TIME

Apple II, II+, IIe; TRS-80 Models III and 4; IBM-PC Computers

* *Easy-To-Use*
* *Fast and Efficient*
* *In use in hundreds of schools*

Quickly enter, transfer and retrieve those important records necessary to good school management. No waiting for service bureaus. Purchase just one program or several and discover how easy it is to have your own in-house management system. Each program will stand alone, or you may transfer information from one to another. For example, student names and class information entered for the *Classifier* can be transferred to the *Reporter*, or the *Inspector*. Attendance material entered for the *Inspector* can easily be transferred to the *Report Card* program. Saves hours of work. Provides quick and easy access to school records. A must for all schools entering the computer age. All programs require 2 disk drives and an 80 column printer.

"We did our scheduling in under 20 hours. Ordinarily it takes about 4 weeks of our principal's time during the summer. Amount of time saved is tremendous."
William Brotherton
Houghton High
Houghton, MI

"The Classifier has saved us about four weeks' work in preparing our master schedule over doing it by hand."
W.T.Sampson High School
FBPO Norfolk, VA

"I saved weeks of time being able to get student schedules and class roster printed."
Martin Gill
American School of Lima

"Keep us in mind as you complete The Officer and The Reporter programs. If they are anywhere near as good as The Classifier they will be fantastic."
Henry Hornbeck
Milford Township H.S.
Milford, IL

THE INSPECTOR

APPLE II DISKETTE
TRS-80 DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....$345.00
1 TRS-80 Diskette, 32K.....$345.00
1 IBM-PC Diskette, 64K.....$345.00

A comprehensive attendance package that provides all the information needed for pupil accounting. Extremely easy to use.

FEATURES:
- all required summary reports for attendance.
- accounting.
- period by period skip lists.
- individual student summary for entire semester.
- exception reporting.
- 10 major categories of attendance.
- 8 user selected sub-categories for absent, enter and withdraw.
- search for chronic absentees.
- compatible with Scheduling and Report Card programs.
- full semester on one disk.
- summaries any time for any period.
- can be used in any school with up to 1,000 students on the Apple, 1,500 students on the TRS-80 and 2,000 students on the IBM-PC.
- complete documentation.
- at present not compatible with Apple IIc.
- additional information upon request.

THE GRADER

APPLE II DISKETTE
TRS-80 DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....$75.00
1 TRS-80 Diskette, 48K.....$75.00
1 IBM-PC Diskette, 128K.....$75.00
The Grader 10 Pack (Special package of 10 copies for the same computer).....$395.00

A teacher's gradebook program designed to help a teacher keep track of grades on homework assignments, tests, classroom participation and any other group of grades. Each data disk can store information about nine different courses. Each course may have up to seventy students and one hundred assignments per student.

FEATURES:
- spreadsheet layout makes data entry and editing easy.
- The Grader may be used alone or is compatible with The Reporter.
- printed copy of part or all of The Grader at any time.
- prints out all grades for a single student or his grade for a particular assignment and the class average for that assignment.
- number or letter grades may be used.
- up to 26 categories of assignments.
- computes and prints grade distribution histograms.
- student names always alphabetized.
- access code protection.
- simple editing of all data.
- at present not compatible with Apple IIc.
- complete documentation.

THE REPORTER

APPLE II DISKETTE
TRS-80 DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....$495.00
1 TRS-80 Diskette, 32K.....$495.00
1 IBM-PC Diskette, 64K.....$495.00

A report card generating package.

FEATURES:
- provides up to 8 marking periods that you may name and use as you see fit.
- has room for up to 15 different courses for each student.
- up to 30 different comments may appear on the report cards -- one per course.
- you decide whether you want "effort" and "conduct" marks for each course and what meaning is assigned to the eight possible levels of each.
- you can choose between full report cards and condensed "labels" to be printed on "sticky labels" for transfer to the student's permanent record.
- you choose between number grades and letter grades.
- if you choose letter grades you can have any you want including different quality points for a grade earned in different phases.
- you specify how much credit each course will carry including fractional credits.
- every report card can carry a printed message about upcoming events.
- calculates class ranking based on either just the current year or based on the student's entire history within the school.
- provides easy editing of mistakes and updates including hard copy of all data entered so that the teachers can verify that their grades have been entered into the machine correctly.
- data is entered by course section so all collation to the student's records is done by machine.
- this program is compatible with the database already established for The Classifier -- or can be used alone.
- at present not compatible with Apple IIc.
- complete documentation.

THE CLASSIFIER

APPLE II DISKETTE
TRS-80 DISKETTE
IBM-PC DISKETTE

1 Apple II Diskette, 48K.....$595.00
1 TRS-80 Diskette, 32K.....$595.00
1 IBM-PC Diskette, 64K.....$595.00

A complete package for scheduling classes in Junior and Senior High Schools.

FEATURES:
- generates a master schedule for you or allows you to specify the meeting times of some or all of the courses if you prefer.
- produces student, teacher and room schedules plus class rosters.
- has a convenient Adds and Drops program that allows you to enter new students at any time or to adjust the schedule of an existing student.
- purchasing the program *and* the microcomputer to run it on costs less than many service bureaus charge for a single year of scheduling.
- turnaround time for trying a new schedule is usually less than one hour.
- hand-scheduling a school of 1,000 students can take upwards of 6 to 10 weeks and considerable experience. Using the Classifier takes under 25 hours from start to finish and you don't need to be an experienced scheduler or an experienced computer user.
- all inputs are guarded against user error and, wherever possible, against user folly.
- thoroughly field-tested. Several hundred satisfied users.
- an original and backup copy of the program is included.
- updates are available for a very nominal fee.
- a yearly maintenance contract that keeps you up to date with the latest release and provides assistance in recovering from machine and operator errors is available.
- at present not compatible with Apple IIc.
- complete documentation.

LEARNING ARTS

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